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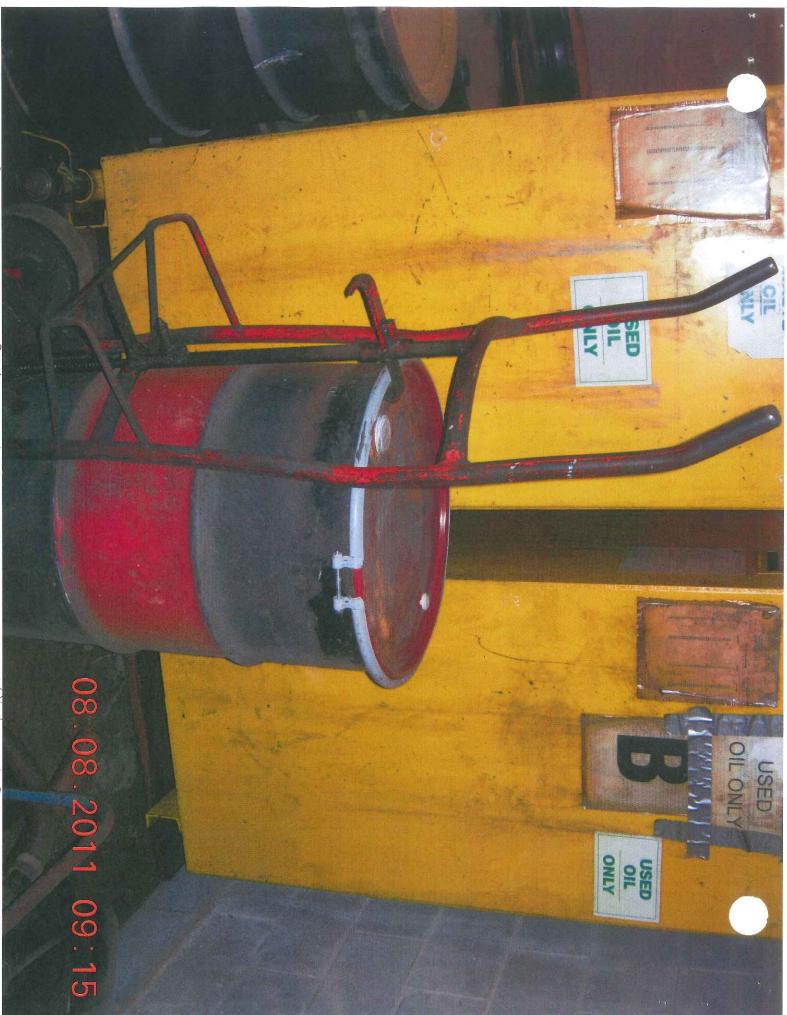
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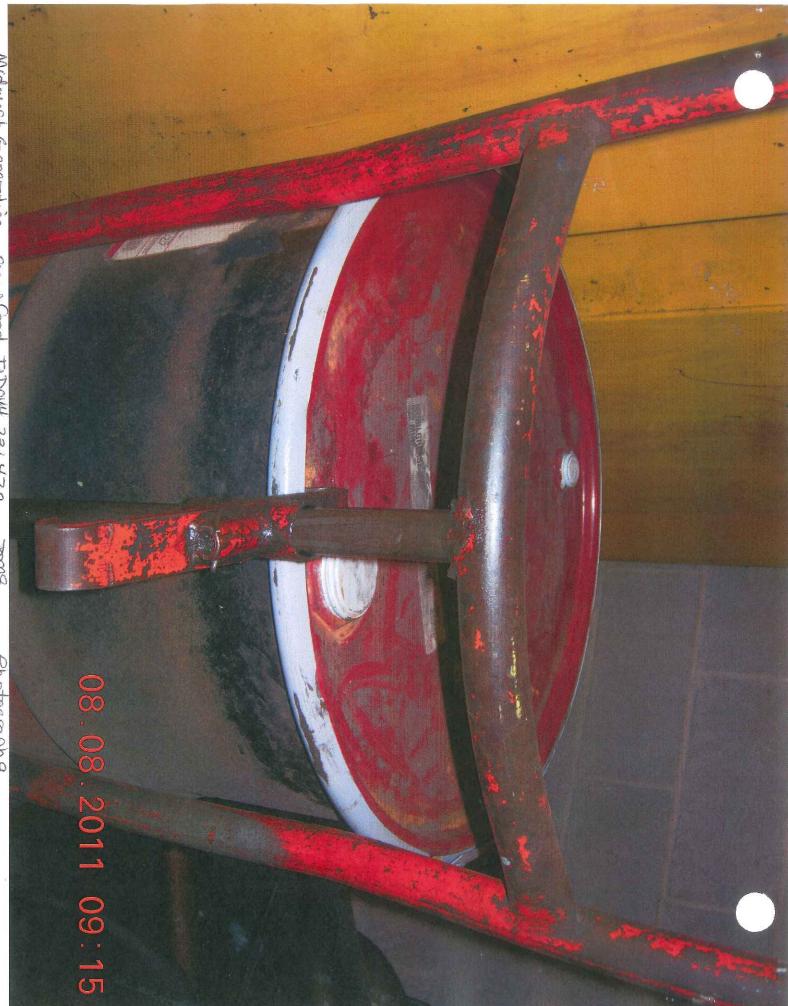
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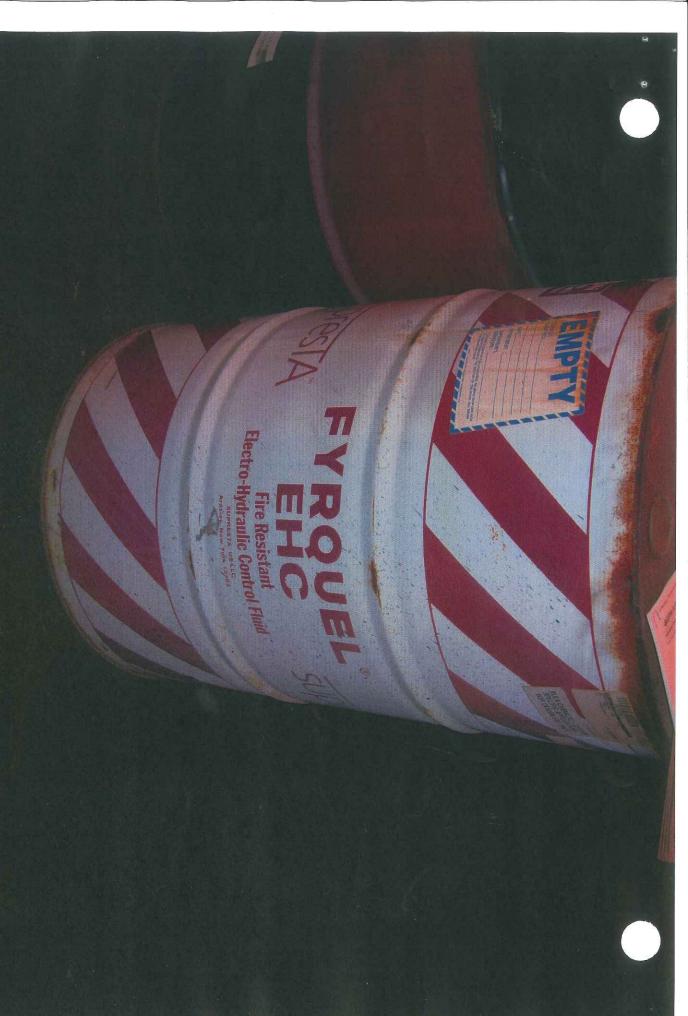
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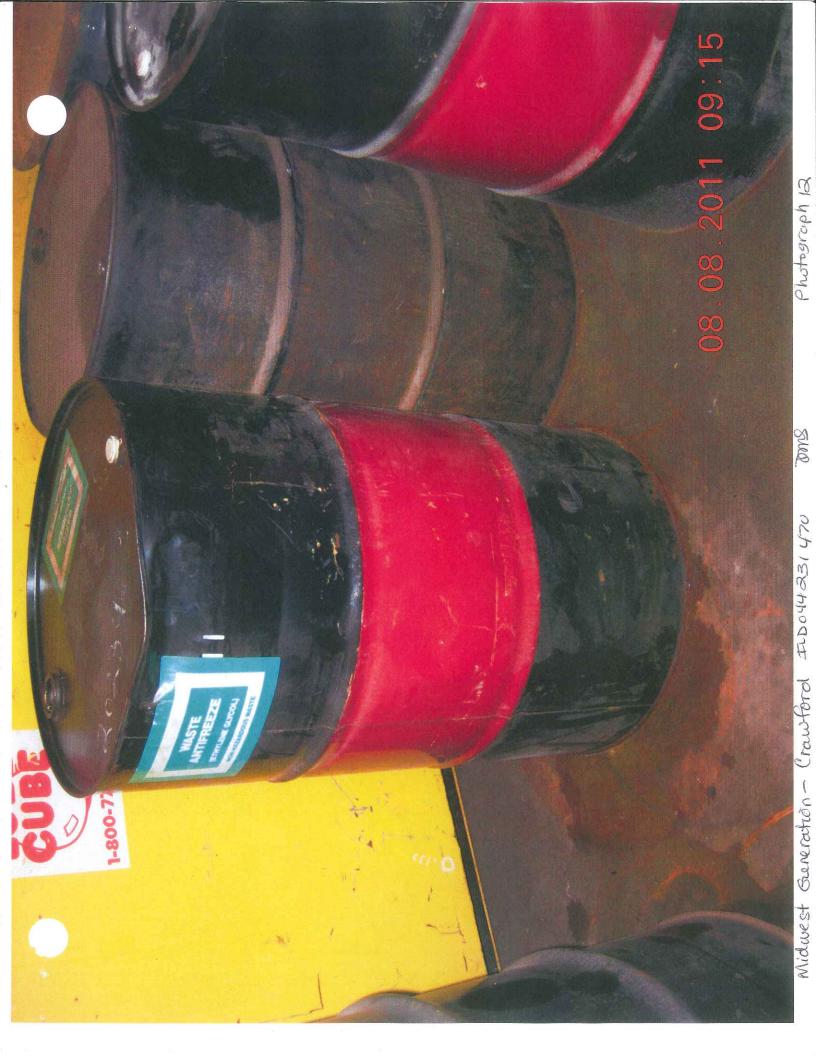
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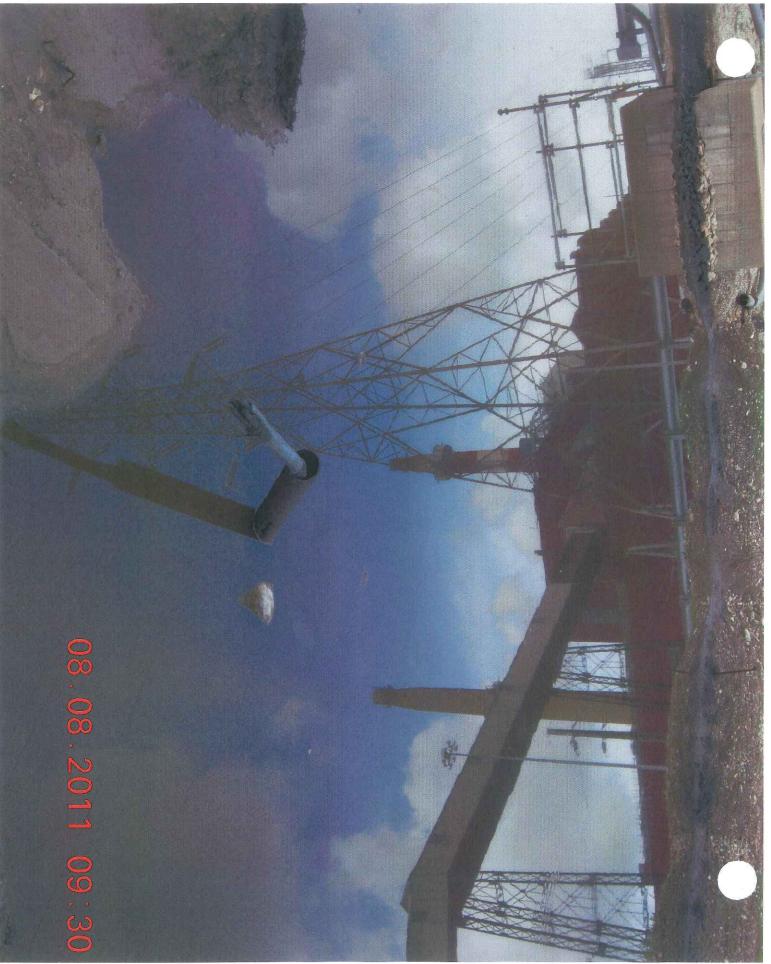
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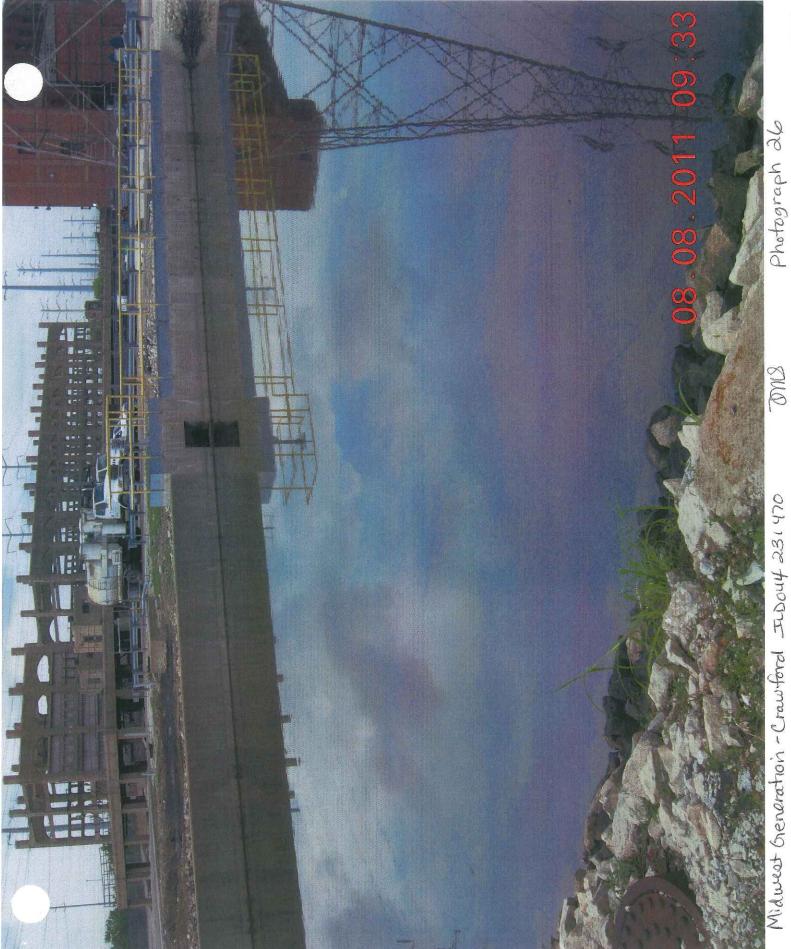


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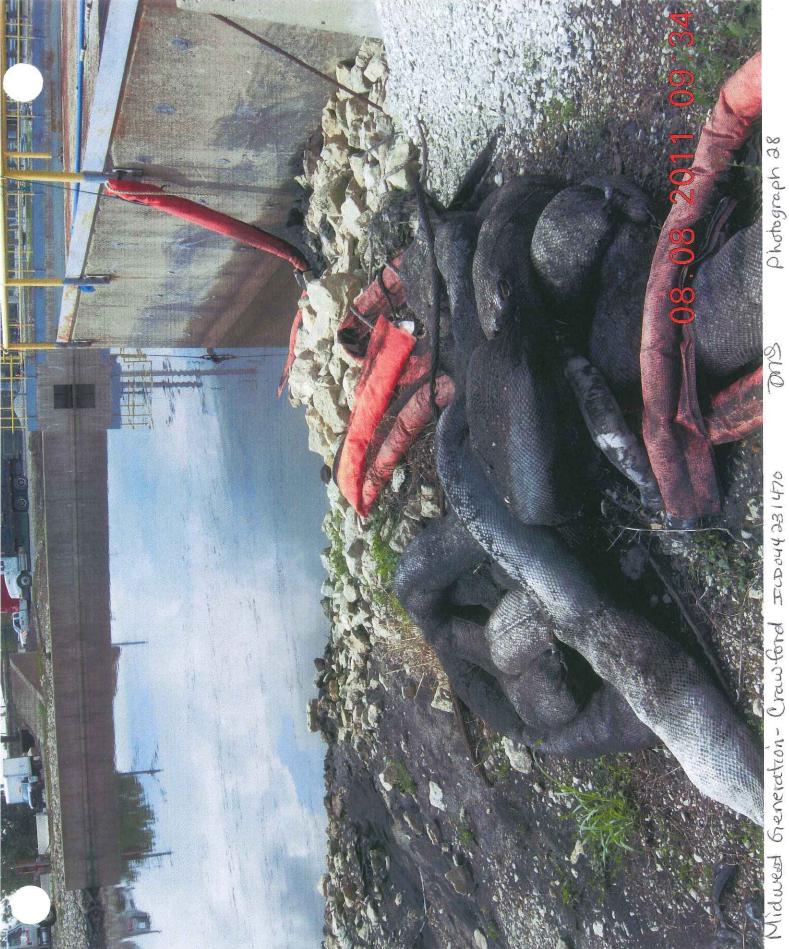
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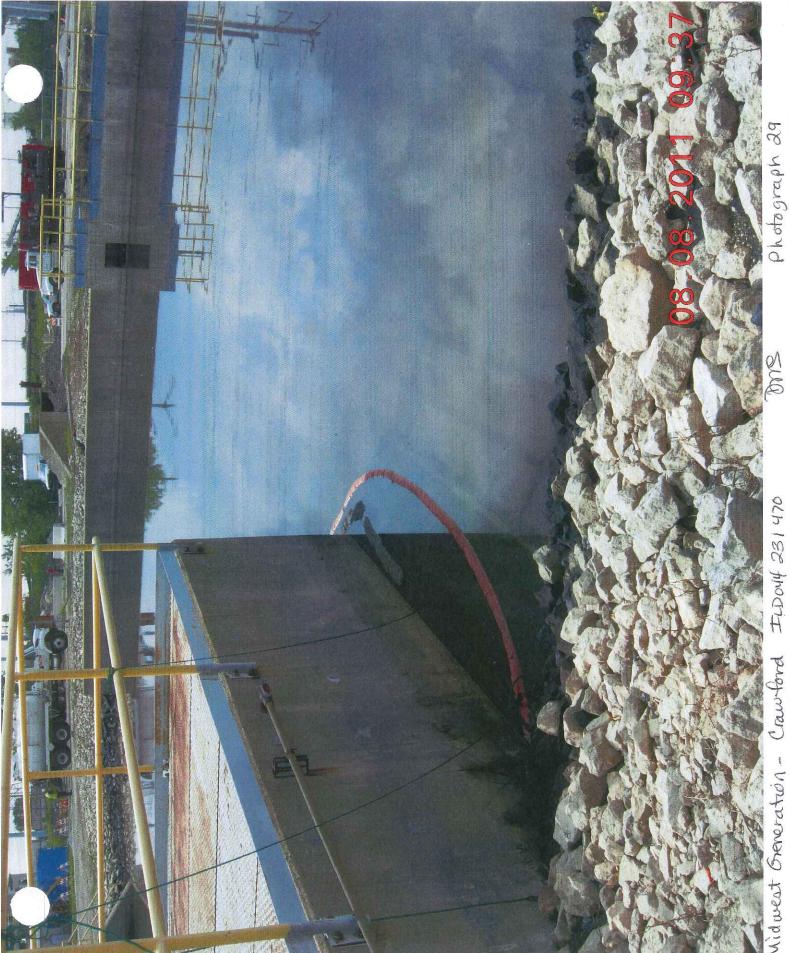
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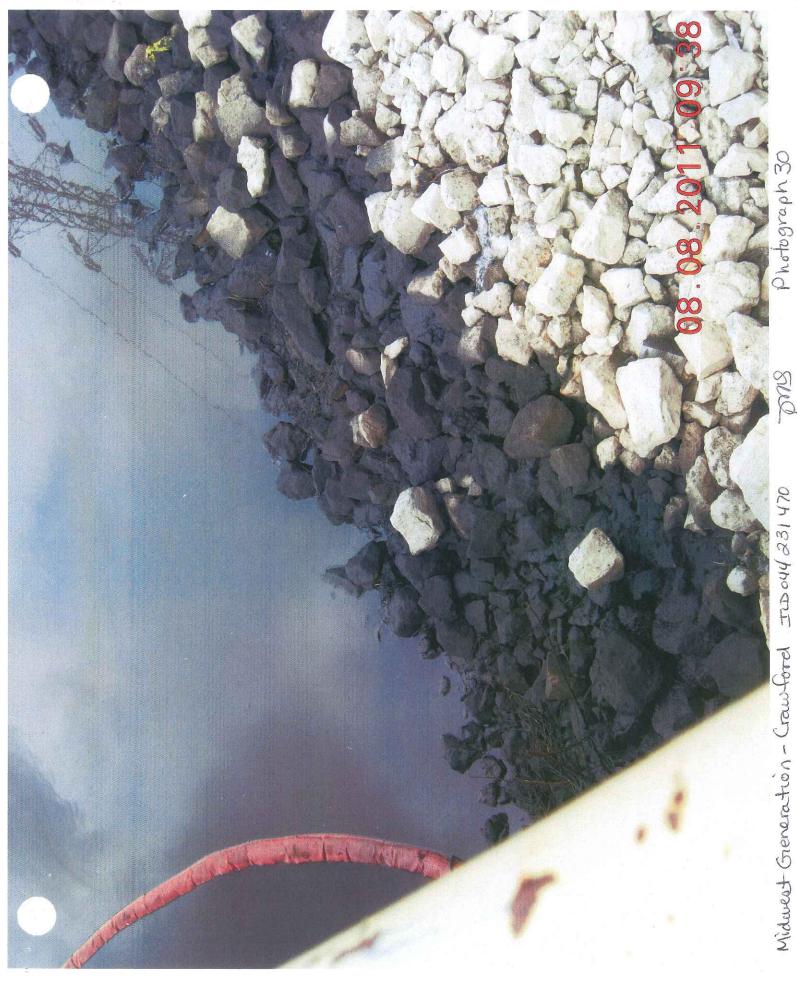
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Photograph 31

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Midwest Greneration-Crawford Its 044231470



Iron4 231 470 Generation - Crawford



Ms. Diane Sharrow United States Environmental Protection Agency Region 5 77 West Jackson Boulevard, LR-8J Chicago, IL 60604

Re:

USEPA Notice of Violation Midwest Generation, LLC Crawford Generating Station EPA ID. NO.: ILD 044 231 470

Dear Ms. Sharrow:

This letter is timely submitted by Midwest Generation, LLC ("MWGen") in response to the above-referenced November 3, 2011 Notice of Violation ("NOV"), received on November 4, 2011.

Although MWGen does not agree with all of the allegations in the NOV, MWGen regrets its issuance and intends to work cooperatively with the United States Environmental Protection Agency ("USEPA") to address the alleged violations concerning its Crawford Generating Station (the "Facility"). To that end, MWGen has already taken steps to address and resolve alleged violations contained in the NOV, as discussed further below.

The following is a response to each of the four (4) alleged violations in the NOV. MWGen generally submits that it did not engage in any non-compliance that directly or indirectly resulted in any discharge to the environment or caused any harm. Further, MWGen submits that the east storage room is used to not only store used oil, but also to store empty drums and other containers until a sufficient number accumulate to ship for recycling.

## Alleged Violations and Responses

1. Containers and aboveground tanks used to store oil at generator facilities must be labeled or marked clearly with the words "Used Oil." See 35 IAC 739.122(c)(1) [40 CFR 279.22(c)(1)]. At the time of the inspection, Midwest Generation had not labeled or marked clearly two aboveground storage tanks, four 55-gallon containers, and two secondary containment units with the words "Used Oil."

## Response:

Although MWGen wishes to resolve these alleged violations without the need for further action, there are inaccuracies in the alleged violations which warrant correction. The

Midwest Generation, LLC Crawford Generating Station 3501 South Pulaski Road Chicago, IL 60623-4987

Tel: 773 247 7272 Fax: 773 247 1072 aboveground storage tanks, which are described in the August 8, 2011 USEPA Inspection Report ("Inspection Report") as "the yellow used oil tanks," already were labeled as "Used Oil" at the time of the USEPA inspection. Further, two of the four 55-gallon containers did not contain used oil and therefore, were not required to be labeled "Used Oil." Finally, as discussed further below, the intended purpose of the secondary containment units was not to store used oil but to contain spills when used oil was being handled and/or transferred. Because these secondary containment units are not used for the purpose of storing used oil, they were not labeled as such at the time of the inspection. Each of these defenses to the alleged violations is explained in more detail below.

Aboveground Storage Tanks: The aboveground storage tanks had "Used Oil" labels on the date of the USEPA inspection. This is clearly seen in USEPA Photo #8 of the Inspection Report. The presence of the "Used Oil" labels also is confirmed in the Inspection Report on page 4, which states that the tanks were labeled with "Used Oil Only." Section 279.22(c) requires that "Containers and aboveground tanks used to store used oil at generator facilities must be labeled or marked clearly with the words "Used Oil." Both aboveground containers had labels that clearly stated "Used Oil." The other labels present on the tanks, stating "Lube Oil" and "Waste Oil," which reflected prior uses of these tanks, are additional labeling that is not prohibited under nor does their presence violate the RCRA Part 279 labeling requirements.

**Drums:** Two of the four 55-gallon drums cited in the Inspection Report did not contain used oil and this is why these two drums were not labeled "Used Oil.". The unlabeled drum identified in USEPA Photo #12 of the Inspection Report contained antifreeze. The MWGen Environmental Specialist Donald Isaacs' August 8, 2011 email to USEPA ("August Email", a copy of which is attached as Exhibit A) confirms this and one of the photos attached to that email, which is also attached to this response separately as Exhibit B, clearly shows the proper labeling was applied. The other drum contained grease. MWGen did not discover and confirm until after the USEPA inspection that this drum contained grease and not used oil. The subject drum was located in front of the two aboveground storage tanks and is depicted in USEPA Photos 8 and 9 of the Inspection Report. Therefore, this drum also did not require a "Used Oil" label. When used oil is stored in drums at the Crawford Station, "closed top" drums are used. As can be seen in USEPA Photos 8 and 9 of the Inspection Report, and more clearly in MWGen's photograph attached as Exhibit C, the subject drum is an "open top" drum, meaning that the entire top can be removed and thus would only contain material suitable for such a container, such as grease.

Secondary Containment Units: MWGen utilizes the secondary containment units inside and outside the east storage room to contain any minor spills when used oil is transferred from or into drums, but that is the limit of their purpose. MWGen has a standard operating procedure to clean the secondary containments on a routine basis. Based upon their use to contain rather than to store used oil, and MWGen's routine practice of cleaning them, these secondary containment units are not properly considered storage containers within the meaning of the RCRA Used Oil regulations that are subject

to the labeling requirements. However, as evidenced by the MWGen photos attached to the August Email and also attached to this response, in order to resolve this dispute and any uncertainty regarding the regulatory compliance status of these units, MWGen has affixed "Used Oil" labels to the secondary containments. See Exhibits D & E.

Notwithstanding its above-described defenses to the USEPA's alleged violations, in order to resolve this matter and address the USEPA's findings without further dispute, on the day of the inspection, MWGen labeled as "Anti-Freeze" or "Used Oil," as appropriate, the four subject drums and two secondary containment units. The attached MWGen photographs, which were also attached to the August Email (see Exhibits B-E), clearly show that MWGen promptly affixed the correct labels to all of the containers and containments, including those identified that did not contain used oil. The photos show the labeled secondary containment inside the east storage room (Ex. E), the yellow secondary containment outside of the HAZMAT building (Ex. D), and the two yellow tanks and one 55-gal. open top drum containing grease. (Ex. C).

2. Upon detection of a release of used oil, a generator must stop the release, contain the release, clean up and manage the release and repair and replace any leaking used oil storage containers or tanks, if necessary, prior to returning them to service. See 35 IAC §739.122(d)(1)-(4) [40 CFR §279.22(d)(1)-(4)]. At the time of the inspection, Midwest Generation had not cleaned up the release of used oil to: 1) the floor of the east storage room including the floor sump or pit; 2) the container secondary containment in the east storage room; 3) on the top of a 55-gallon container; and 4) the yellow secondary containment box located along the exterior wall on the south side of the HAZMAT Building. In addition, the secondary containment was not free of used oil, closed or marked clearly with the words "Used Oil."

## Response:

MWGen disputes these alleged violations on several grounds. There was not a "release" of used oil into the environment. The observed "dried used oil" was not liquid used oil that had not been cleaned up. The alleged observation of a small patch of liquid used oil was not used oil. MWGen maintains that any release of used oil had been cleaned up and managed in accordance with applicable RCRA requirements.

The Inspection Report states that the floor of the east storage room had "dried used oil." This condition is more accurately described as residual oil staining. It was not "free-flowing" used oil. It was staining that resulted from cleaning up used oil from the floor of the east storage room. There was no liquid or pooled used oil in the east storage room at the time of the inspection.

<sup>&</sup>lt;sup>1</sup> Section 279.10(c) of the RCRA Used Oil standards provides that materials containing or otherwise contaminated with used oil "from which the used oil has been properly drained or removed to the extent possible such that no visible signs of <u>free-flowing</u> oil remain in or on the material are not used oil" and are not subject to the requirements of RCRA Part 279. 40 CFR 279.10(c), emphasis added. Section 739.110(c) of the Illinois Pollution Control Board regulations contains the same exclusion. 35 IAC § 739.110(c).

The Inspection Report also states that there was a small patch of liquid used oil. However, no sample was taken from the small patch to confirm it was liquid used oil. Also, it appears from the USEPA inspection report photographs, numbered 11 & 12 that the subject liquid was water from the two 55-gallon drums that contained rainwater. MWGen had the contents of these two barrels analyzed by SET, an outside environmental services provider. The analytical results from the barrel contents samples show that the contents were water, not used oil. (See copy of SET analytical report on the two 55-gal. drums attached as Exhibit G). Thus, the small patch of liquid observed on the floor by the USEPA inspector was water, not used oil.

Even if there were a patch of used oil on the floor in the east storage room, this condition does not represent a release of used oil to the "environment" within the meaning of RCRA. The floor of the east storage room is not "the environment." This conclusion equally applies to the sump and the secondary containment in the east storage room, the top of the 55-gallon container, and the yellow secondary containment outside of the HAZMAT building. The term "release" is not defined in the Used Oil RCRA regulations, or in RCRA generally. However, it is informative on this issue to consider the definition of "release" under CERCLA. CERCLA defines a "release" in relevant part as: "any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment" with an express exclusion for "any release which results in exposure to persons solely within a workplace." 42 USC §9601(22). (The Illinois Environmental Protection Act ("ILEPA Act") defines "release" in very similar terms. See 415 ILCS 5/3.395.) Thus, under CERCLA a release means that the substance was released "into the environment." CERCLA's definition of the term "environment" does not include the interior of a storage building.<sup>2</sup> See 42 USC §9601(8).

MWGen submits that if used oil is spilled in the east storage room, this does not constitute a "release into the environment." Any small amount of liquid in the east storage room is fully contained in the work space, not exposed to the elements, the environment, or able to leak out of the building. Similarly, the presence of a thin film of used oil that was contained on the top of the 55-gallon container is also not a release to the environment. It was contained on top of the drum inside the building in the east storage room building.

Notwithstanding its above-described defenses to the USEPA's alleged violations, in order to resolve this matter and address the USEPA's findings without further dispute, at the time of the inspection, MWGen personnel quickly wiped the oily film on top of the 55-gallon drum, as documented in photo enclosed as Exhibit F (Photo #2823). MWGen also

<sup>&</sup>lt;sup>2</sup> "Environment" is defined in CERCLA as "(A) the navigable waters, the waters of the contiguous zone, and the ocean waters of which the natural resources are under the exclusive management authority of the United States under the Fishery Conservation and Management Act of 1976, and (B) any other surface water, ground water, drinking water supply, land surface or subsurface strata, or ambient air within the United States or under the jurisdiction of the United States." 42 USC §9601(8). The Seventh Circuit has found that "[t]he interior of a place of employment is not "the environment" for purposes of CERCLA. " Covalt v. Carey Canada Inc., 860 F.2d 1434, 1439 (7th Cir., 1988).

wiped up the small patches of water on the floor in the east storage room and cleaned the pit in the east storage room to remove any liquid or sheen. Finally, on November 14, 2011, MWGen took the addition step of power-washing the floor of the east storage room with hot water in order to remove any staining.

3. Containers and aboveground tanks used to store used oil at generator facilities must be in good condition. See 35 IAC §739.122(b)(1) [40 CFR §279.22(b)(1)]. At the time of the inspection, Midwest Generation was using containers to store used oil that were not in good condition.

### Response:

In the subject east storage room, only two drums were storing used oil and both were in good condition. These are the two drums shown in Exhibit B, which MWGen labeled as "Used Oil" after the inspection. The condition of the subject containers did not violate the cited Illinois and federal RCRA regulations. The remaining drums did not contain used oil. They were being collected in the east storage room not for use to store used oil but rather for eventual drum recycling or drum disposal as scrap. Consistent with with the fact that they did not contain used oil, they were not labeled "Used Oil." The Inspection Report does not assert otherwise. Accordingly, whatever the condition of these containers, it did not violate the cited provisions of 35 IAC §739.122(b)(1) [40 CFR §279.22(b)(1)] because those provisions are inapplicable to empty containers not being "used to store used oil" as specified in §739.122(b)(1). Therefore, the condition of the containers, which are destined for recycling, is not a violation of Section 279.122(b). MWGen has since removed all of the empty containers for recycling or disposal for scrap.

Even if the containers had contained used oil, their condition was not in violation of the cited regulations. The containers did not exhibit severe rusting or deterioration. The alleged violation does not contain a complete recitation of the relevant language of Illinois RCRA section 739.122(b)(1) or RCRA section 279.22(b)(1) concerning what constitutes a drum in "good condition." Both of these regulations provide that containers "must be in good condition ((no severe rusting, apparent structural defects or deterioration)." The "primary objective of requiring tanks and containers to be in good condition is to prevent the release of used oil to the environment, and 'severe rusting,' along with apparent structural defects or deterioration," would be an indication that the integrity of the tank is questionable. In re Dearborn Refining Co., RCRA-05-2001-0019, 2003 WL 22078598 (August 18, 2003). Neither the description of the alleged violations nor the contents of the Inspection Report clearly identify which containers are the subject of the alleged violations,<sup>3</sup> It is impossible to tell exactly what containers USEPA claims were not in "good condition." However, from a review of similar photos taken by MWGen personnel at the time of the inspection, it is evident that there is no severe rusting nor structural defects on any containers such that their condition threatened to cause a release of their contents. The photograph attached as Exhibit F shows empty

<sup>3</sup> The Inspection Report cites photos 7 through 12 as examples of containers with condition issues, all of which are black and white and very dark in the copy MWGen was provided.

containers with no apparent or severe rusting. Similarly, the drums shown in the photograph attached as Exhibit B show rusting on the drums that is not severe nor are there structural defects or deterioration such that a release of used oil would occur.

Further, the drums that were identified in the USEPA Inspection Report as "bowed" in the bottom and "dented" did not contain used oil MWGen had their contents analyzed by SET Environmental, Inc. ("SET") and the attached analysis report (Exhibit G) shows that the contents were water. Those drums were moved to the east storage room for drum recycling or disposal as scrap.

In sum, the only two drums that contained used oil were in good condition. MWGen will continue to use containers that are in good condition for storage of used oil, meaning they are free of severe rusting, apparent structural defects or deterioration.

4. Used oil generators shall not store used oil in units other than aboveground tanks, containers, or units subject to regulation under 35 IAC 724 and 725 [40 CPR Parts 264 or 265]. Generators of used oil shall not manage used oil in a surface impoundment unit unless the surface impoundment unit is subject to regulation under 35 IAC 724 and 725 [40 CPR Parts 264 or 265]. See 35 IAC § 739.I22(a) [40 CPR § 279.22(a)]. At the time of the inspection, Midwest Generation was storing used oil in a floor sump or pit in the east storage room of the HAZMAT Building, and in two surface impoundments not subject to regulation under 35 IAC 724 and 725 [40 CPR Parts 264 or 265].

### Response:

The referenced "two surface impoundments" are not used by MWGen to store used oil. The "two surface impoundments" referenced in this alleged violation are referred to in the Crawford Station's NPDES Permit No. IL 0002186 as the "South Detention Basin" and are internally referred to by MWGen as stormwater "Basin 9" or "Pit 9." Basin 9 collects stormwater runoff from the surrounding area and the wastewater generated from washing the coal conveyor belt, Conveyor 4, that is located on the northeast side of this stormwater basin. The South Detention Basin's purpose and function is as a collection point for stormwater runoff to be treated on-site in the Station's wastewater treatment system. This fact is confirmed in the provisions of the 2001 Crawford Station NPDES Permit, which is the currently effective permit. A copy of the 2001 Crawford Station NPDES Permit is attached as Exhibit H. Page 5 of the NPDES Permit specifically identifies the South Detention Basin as a collection point for area stormwater runoff which is allowed to be discharged through Outfall C01 subject to the applicable effluent limitations. (See p. 5, Item 14 and Outfall C01 Effluent Limitations, of the Crawford Station NPDES Permit).

Section 279.10(f) of the RCRA Used Oil regulations and section 739.110(f) of the Illinois RCRA regulations both provide that: "'Wastewater,' the discharge of which is regulated under either section 402 or 307(b) of the CWA (including wastewaters at facilities which have eliminated the discharge of wastewater), contaminated with *de minimis* quantities of

used oil are not subject to the requirements of this part. *De minimis* quantities of used oil are small spills, leaks, or drippings from pumps, machinery, pipes, and other similar equipment during normal operations, or small amounts of oil lost to the wastewater treatment system during washing or draining operations." 40 CFR 279.10(f); 35 IAC 739.110(f).

As the purpose of the South Detention Basin is to collect stormwater runoff, it also collects *de minimis* quantities of used oil that have come in contact with the stormwater runoff before it enters the South Detention Basin. Pursuant to Section 279.10(f), these *de minimis* quantities are not subject to the requirements of Part 279, and therefore MWGen is not in violation of Section 279.22(a). The USEPA Inspection Report acknowledges that storm water flows into the South Detention Basin. (Inspection Report at p. 4). The runoff area is part of an operating power plant facility which has multiple pumps, pipes and machines. The stormwater runoff collects *de minimis* amounts of used oil from small spills, or leaks or drippings from those pumps, machinery, pipes and other similar equipment as it travels to the South Detention Basin. As seen in the aerial photo given to MWGen on the date of the inspection, there is a coal conveyor belt and wash out area on the nCorth side of the South Detention Basin. This equipment likely has small and infrequent drippings of used oil, satisfying the definition of *de minimis within the RCRA regulations*.

The South Detention Basin is the beginning of the treatment process for the stormwater it collects. The stormwater from the area known as the "Former Peaker Yard," passes through an oil/water separator before entering the South Detention Basin. Further, any oil that passes through the oil/water separator and may collect on the surface of the stormwater in the South Detention Basin is contained by booms and removed by skimming. In sum, MWGen does not use the South Detention Basin to store "used oil" within the meaning of the RCRA regulations.

MWGen suspects that the USEPA's used oil allegations regarding the South Detention Basin may at least in part be based on the observation of a sheen in the aerial photograph of the South Detention Basin and that during the USEPA's inspection, staining was observed on rock, cobble, and soil in and around the South Detention Basin. This staining did not arise from the use of the South Detention Basin to store used oil. It originates from two primary sources. First, the oil stains in the south side of the South Detention Basin are attributable to the emergency response actions taken when very heavy rainfall events and resulting extensive flooding occurred in 2010. On July 24, 2010 over 6.4 inches of rain fell at Chicago O'Hare Airport causing extensive flooding at the Crawford Station, including flooding of the Station's turbine basement to a peak height of 7 feet, 9 inches, with an estimated volume of 2.5 million gallons, when flood waters from the adjacent Chicago Sanitary & Ship Canal (CSSC) entered the turbine basement. Because of the flooding, the Station's turbine lube oils stored in the basement were displaced. Most of the lube oil was pumped out and collected from the basement into oil removal trucks brought onsite by MWGen. The oily water was pumped into the trucks and the water that settled below the floating oil at the bottom of the trucks was pumped out and passed through a rented, temporary oil/water separator. The treated

water exiting the temporary oil/water separator was then conveyed to the South Detention Basin for further treatment in the Station's Wastewater Treatment System prior to discharge through the NPDES permitted Outfall C01 and back into the CSSC. As part of these emergency response measures, after the turbine basement flood waters entered the South Detention Basin, a vacuum truck was used to skim off material from the surface. At no time was the South Detention Basin used to "store" used oil. The basin's use was limited to providing temporary capacity for the huge volume of flood waters pumped from the turbine basement in order to allow it to be fed into the existing Wastewater Treatment System due to the higher levels of oil & grease and total suspended solids (TSS) in these flood waters.

The Crawford Station received an emergency variance from the Illinois Environmental Protection Agency to allow the discharge of the treated flood waters from the turbine basement at Outfall C01. (see the Illinois EPA Variance attached as Exhibit I). The variance included higher discharge limits for oil & grease and TSS than were allowed under the Station's NPDES Permit discharge limits for Outfall C01. Ultimately, MWGen was able to manage and treat the flood water so that the discharge limits in the Station's NPDES Permit were never exceeded. However, Station personnel familiar with conditions before and after the 2010 flood event believe that an effect of the flood was the staining that remains along the south side of the South Detention Basin. MWGen submits that this staining is not a reasonable or credible basis on which to allege that the 2010 flood events constitute the use of the South Detention Basin to store used oil. The flood waters that contained the turbine oils were handled expeditiously and competently under very difficult, emergency circumstances and without any harm or adverse effect to the environment.

With regard to the floor sump in the east storage room, it is not MWGen's regular practice to store used oil in the floor sump. The floor sump is used as secondary containment to contain any accidental spills so that they are not released to the environment. MWGen properly cleans the floor sump using a licensed contractor, which takes the liquid and properly treats it. MWGen acknowledges that there was a small amount of liquid sitting in the floor sump at the time of the inspection, but does not agree it was used oil. Nevertheless, in response to the USEPA's concerns, MWGen recently had the floor sump in the east storage room cleaned. No sheen was seen in the rinse waters generated from cleaning the floor sump. Due to the lack of any sheen on the rinse water, we believe this observed liquid was merely water from rain that enters the east storage room at times when the rollup door was open. Further, MWGen will continue to promptly remove any spilled liquid that collects in the floor sump.

In the event that we have not correctly interpreted the alleged violations, please so advise us and we will respond further as needed. By submitting this response, we do not admit any liability for the alleged deficiencies. MWGen also reserves its right to raise additional defenses and mitigation arguments, as may be necessary, in defense of the allegations listed in the NOV in the event of any future enforcement.

MWGen would be happy to meet with the USEPA to further discuss and explain the above responses and to reach a final resolution to the Notice of Violation. Also, if you have any questions, please feel free to contact Michael Hanrahan, Managing Director, at (773) 650-5412.

Sincerely.

Michael Hanrahan

Managing Director – Fisk and Crawford Stations

### Donald Isaacs/Crawford/EMG/EIX

08/08/2011 08:16 PM

To sharrow.diane@epa.gov

CC

Subj Today's Inspection- Midwest Generation Crawford

ect

#### Dear Ms. Sharrow,

It was a pleasure meeting with you today on your inspection of the Crawford Generating Station. I am following up with photographs of the areas regarding used oil we had spoken about. The following photo numbers are accompanied by my descriptions of the attachments. Any questions please contact me.

### Photo 2827

Drums pointed out earlier today are the 2 in foreground center and 1 to the right. These are labelled are as follows:

Foreground center- Was a labelled transformer fluid drum. This is now labelled "used oil" as this drum was recently brought in to used oil room for recycling.

Right side- Drum was a labelled hydraulic fluid drum. This is now labelled "used oil" as this drum was recently brought in to used oil room for recycling.

Background- is new drum of used antifreeze, with label.

#### Photos 2829 and 856

Drum containments for used oil (had been used for draining drums of residual used oil). Now are labelled "used oil" as discussed.

### Photo 857

New used oil drum recently brought in to used oil room for recycling. Now has label "used oil". In upper left, see new label of empty used oil tank (over old Waste Oil label)

#### Photo 2823

Empty drum stack; drum at left center has been wiped clean of liquid oil residual previously on top, as discussed.





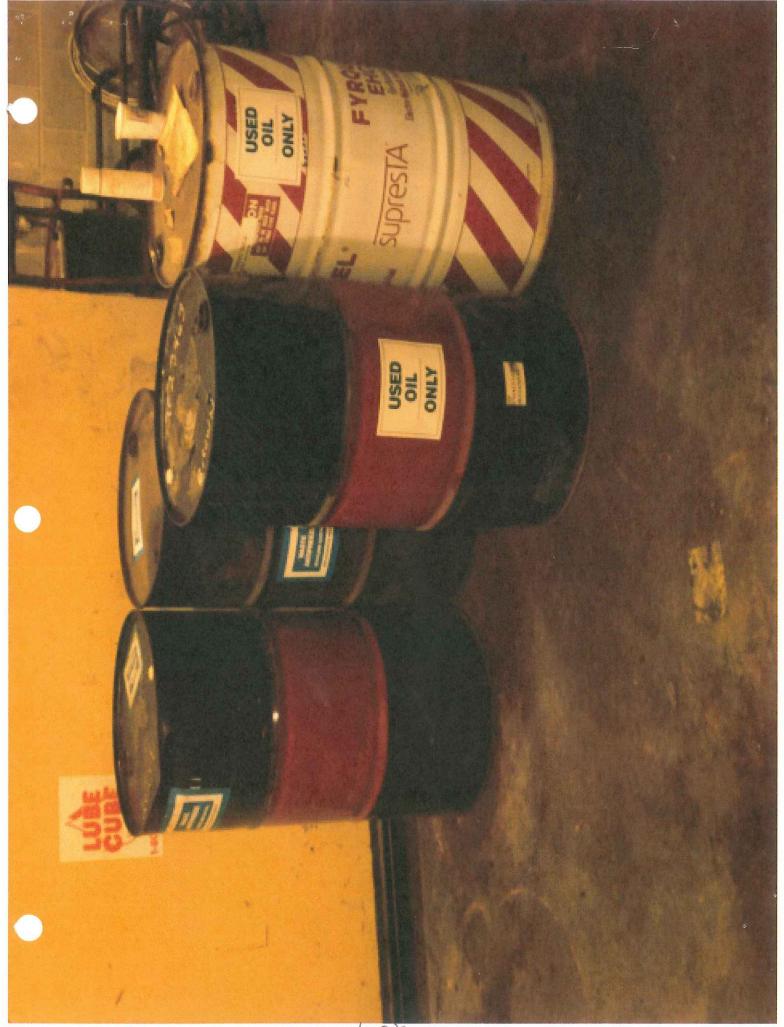






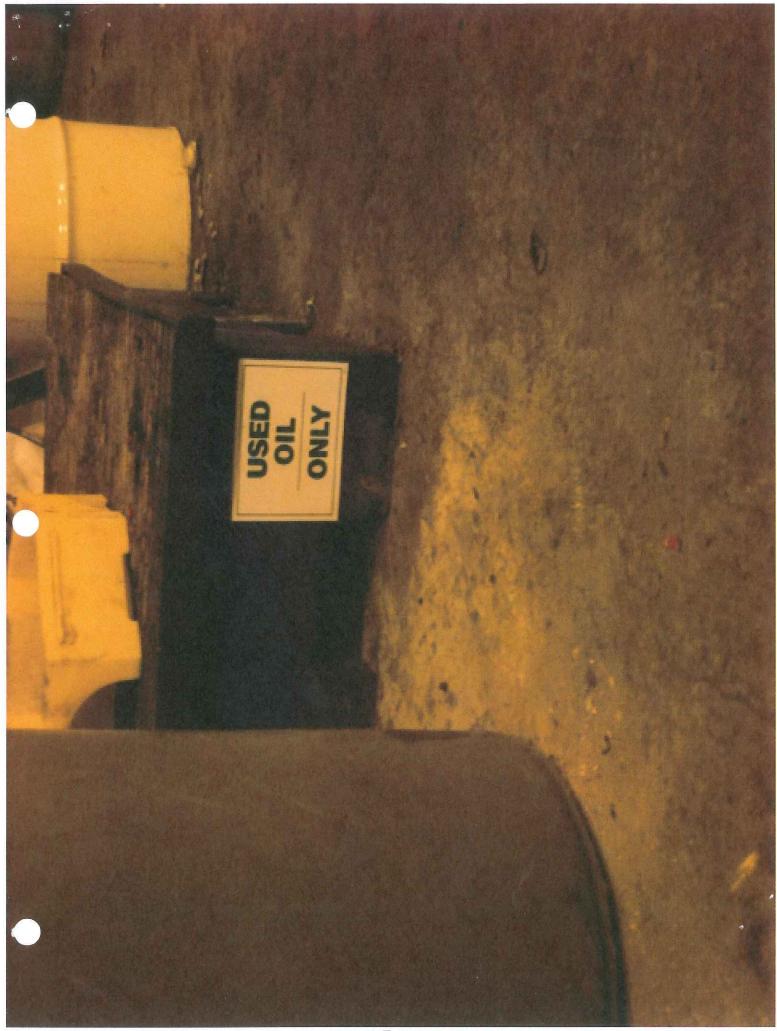
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Donald A. Isaacs Environmental Specialist Midwest Generation Crawford and Fisk Stations 773-650-5489

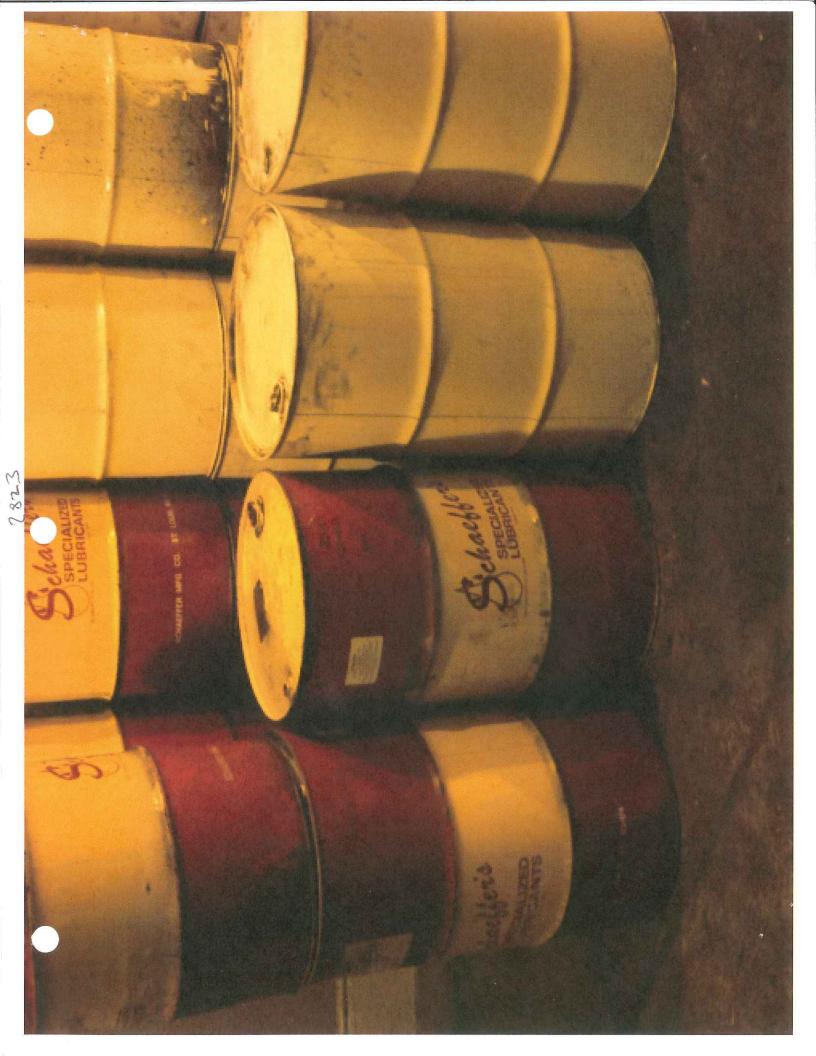








628Z



Report Number: 6051-5235



# ANALYTICAL REPORT

Prepared For:

Midwest Generation-Crawford

Analysis Completed: 8/19/2011

Description of Samples Received: 2 SAMPLES FOR ANALYSIS

Description of Services Rendered: Unknown Identification

\*Results furnished on attached pages\*

If you have any questions regarding this report, please contact the SET Laboratory staff at (847) 537-9221.

Bijan Saeedi Laboratory Manager

	Report Number: 6051-5235
Sample Number	Size Chemical Name
DM-1	4 oz. Water Trace: iron oxide / Aliphatic oil
	Characteristics
	Physical Appearance: Cloudy liquid with organic sheen
	Solubility in Water: Partly Reducer: Yes X No
	Approximate pH: 6.5 Flammability potential: Yes X No Oxidizer: Yes X No Reactive: Yes X No
	Polymerizable: Yes X No Unstable: Yes X No
Sample Number	Size Chemical Name
DM-2	4 oz. Water Trace: iron oxide / Aliphatic oil / Calcium chloride
	Characteristics
	Physical Appearance: Cloudy liquid with organic sheen
	Solubility in Water: Partly Reducer: Yes X No
	Approximate pH: 6.3 Flammability potential: $\square$ Yes $\square$ No Oxidizer: $\square$ Yes $\square$ No Reactive: $\square$ Yes $\square$ No
	Polymerizable: Yes X No Unstable: Yes X No
	END OF REPORT
Note: Due to	the heterogeneous nature of the samples, other components may be present at trace levels.

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## ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 North Grand Avenue East, P.O. Box 19276, Springfield, Illinois 62794-9276

THOMAS V. SKINNER, DIRECTOR

217/782-0610

August 15, 2001

Midwest Generation, LLC Environmental, Health and Safety Dept. One Financial Place 440 South LaSalle Street, Suite 3500 Chicago, Illinois 60605

Re: Midwest Generation, LLC

Crawford Generating Station NPDES Permit No. IL0002186

Modification of NPDES Permit (After Public Notice)

#### Gentlemen:

The Illinois Environmental Protection Agency has reviewed the request for modification of the above-referenced NPDES Permit and issued a public notice based on that request. The final decision of the Agency is to modify the Permit as follows:

Include the intermittent discharge of impounded stormwater from the on-site dredged material disposal facility in the description of wastestreams that comprise the discharge from Outfall C01.

Enclosed is a copy of the modified Permit. You have the right to appeal this modification to the Illinois Pollution Control Board within a 35 day period following the modification date shown on the first page of the permit.

Should you have any question or comments regarding the above, please contact Beth Unser of my staff.

Very truly yours,

Thomas G. McSwiggin, P.É.

Manager, Permit Section

Division of Water Pollution Control

TGM:BAU:99101901.daa

Attachment: Modified Permit

cc: Records

Compliance Assurance Section

Des Plaines Region

US EPA

GEORGE H. RYAN, GOVERNOR

### NPDES Permit No. IL0002186

Illinois Environmental Protection Agency

Division of Water Pollution Control

1021 North Grand Avenue East

Post Office Box 19276

Springfield, Illinois 62794-9276

## NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

Modified (NPDES) Permit

Expiration Date: April 30, 2005

Issue Date: April 24, 2000 Effective Date: May 1, 2000

Modification Date: August 15, 2001

Name and Address of Permittee:

Midwest Generation, LLC Environmental, Health and Safety Dept. One Financial Place 440 South LaSalle Street, Suite 3500 Chicago, Illinois 60605 Facility Name and Address:

Midwest Generation, LLC Crawford Generating Station 3501 South Pulaski Chicago, Illinois 60603

Discharge Number and Name:

Receiving Waters:

001 Condenser Cooling Water and House Service Water

A01 Demineralizer Regenerant Wastes

B01 Unit #7 and #8 Boiler Blowdown and Boiler Drain

C01 Recirculating Wastewater Treatment System Blowdown

D01 Intake Screen Backwash

002 Area 14 Runoff (Boiler Room Area)

Chicago Sanitary and Ship Canal

In compliance with the provisions of the Illinois Environmental Protection Act, Title 35 of Ill. Adm. Code, Subtitle C and/or Subtitle D, Chapter 1, and the Clean Water Act (CWA), the above-named permittee is hereby authorized to discharge at the above location to the above-named receiving stream in accordance with the standard conditions and attachments herein.

Permittee is not authorized to discharge after the above expiration date. In order to receive authorization to discharge beyond the expiration date, the permittee shall submit the proper application as required by the Illinois Environmental Protection Agency (IEPA) not later than 180 days prior to the expiration date.

Thomas G. McSwiggin, P.E. Manager, Permit Section

Division of Water Pollution Control

TGM:BAU:99101901.daa

### NPDES Permit No. IL0002186

### Effluent Limitations and Monitoring

	LOAD LIMITS lbs/dav		CONCENT			
PARAMETER	30 DAY AVG.	DAILY MAX.	30 DAY AVG.	DAILY MAX.	SAMPLE FREQUENCY	SAMPLE TYPE

1. From the modification date of this permit until the expiration date, the effluent of the following discharge(s) shall be monitored and limited at all times as follows:

Outfall(s): 001 Condenser Cooling Water and House Service Water\*\* . . .

This discharge consists of:	Approximate Flow
1. Condenser Cooling Water	355.71 MGD
2. House Service Water	9.0 MGD
3. Demineralizer Regenerant Wastes	0.035 MGD
4. Boiler Blowdown	0.055 MGD
5. Boiler Drain	Intermittent
Recirculating Wastewater Treatment System Blowdown	1.05 MGD
7. Intake Screen Backwash	Intermittent

Flow (MGD) See Special Condition 1 Daily Continuous

Temperature See Special Conditions 3, 4 and 5 Daily Continuous

Total Residual Chlorine/Total Residual Oxidant\* 0.2 1/Week \*Concentration Curve

<sup>\*</sup>See Special Conditions 6 and 17.

<sup>\*\*</sup>See Special Condition 18.

1/Year

Grab

### NPDES Permit No. IL0002186

### **Effluent Limitations and Monitoring**

**LOAD LIMITS** CONCENTRATION lbs/day LIMITS ma/L 30 DAY DAILY DAILY SAMPLE AVG. **PARAMETER** MAX. AVG. MAX. **FREQUENCY** TYPE

1. From the modification date of this permit until the expiration date, the effluent of the following discharge(s) shall be monitored and limited at all times as follows:

Outfall(s): A01 Demineralizer Regenerant Wastes

This discharge consists of: Approximate Flow 1. Demineralizer Regenerant Wastes 0.024 MGD Flow (MGD) See Special Condition 1 Daily Continuous Total Suspended Solids 15 30 1/Month Grab\* Oil and Grease 15 20

<sup>\*</sup>Sample type shall be 8-hour composite if the equalization tank is bypassed for maintenance purposes.

### NPDES Permit No. IL0002186

### **Effluent Limitations and Monitoring**

	LOAD L	IMITS	CONCENT	'RATION		
	lbs/	lbs/day		<u>mg/l</u>		
	30 DAY	DAILY	30 DAY	DAILY	SAMPLE	SAMPLE
PARAMETER	AVG.	MAX.	AVG.	MAX.	FREQUENCY	TYPE

1. From the modification date of this permit until the expiration date, the effluent of the following discharge(s) shall be monitored and limited at all times as follows:

Outfall(s): B01 Unit #7 and #8 Boiler Blowdown and Boiler Drain

This Discharge Consists of:	,		Appro	ximate Flow	
Boiler Blowdown     Boiler Drain				0.036 MGD Intermittent	
Flow (MGD)	See Special Condition 1			Daily	Continuous
Total Suspended Solids		15	30	1/Month	8-hour Composite
Oil and Grease		15	20	1/Year	Grab

### NPDES Permit No. IL0002186

### Effluent Limitations and Monitoring

		LOAD LIMITS lbs/dav		'RATION S ma/l		
PARAMETER	30 DAY	DAILY	30 DAY	DAILY	SAMPLE	SAMPLE
	AVG.	MAX.	AVG.	MAX.	FREQUENCY	TYPE

<sup>1.</sup> From the modification date of this permit until the expiration date, the effluent of the following discharge(s) shall be monitored and limited at all times as follows:

Outfall(s): C01 Recirculating Wastewater Treatment System Blowdown\*\*

This discharge consists of			Approximate Flow			
<ol> <li>Demineralizer filter ba</li> <li>Boiler and turbine built</li> <li>Fuel oil handling area</li> <li>Unit #7 air compresso</li> <li>Coal storage area #2 i</li> <li>Settling basin area #3</li> <li>Ash pile area #18 rund</li> <li>Yard drainage area #1</li> <li>Ash hopper area #16</li> <li>South detention basin a. Transmission terming</li> <li>Transformer area #</li> </ol>	<ol> <li>Ash hopper overflow</li> <li>Coal pile runoff</li> <li>Non-Chemical metal cleaning wastes</li> <li>Demineralizer filter backwash</li> <li>Boiler and turbine building floor drains</li> <li>Fuel oil handling area runoff</li> <li>Unit #7 air compressor cooling water</li> <li>Coal storage area #2 runoff</li> <li>Settling basin area #3 runoff</li> <li>Ash pile area #18 runoff</li> <li>Yard drainage area #15</li> <li>Ash hopper area #16</li> <li>South detention basin consisting of area runoff from:         <ul> <li>Transmission terminal areas #5, 6 and 12</li> <li>Transformer area #7</li> <li>Oil storage areas #8 and 9</li> </ul> </li> </ol>					
15. Impounded stormwate	r from the dredged material dis	sposal facility	•	Intermittent		
Flow (MGD)	See Special Condition 1			Daily	Continuous	
рH	See Special Condition 2		•	1/Week	Grab	
Total Suspended Solids		15	30	1/Week	24 Hour Composite	
Oil and Grease		15	20	1/Week	Grab	

1.0

1.0

1/Month\*

1/Month\*

24 Hour Composite

24 Hour Composite

1.0

0.5

Outfall(s): D01 Intake Screen Backwash

See Special Condition 11

Iron

Copper

Outfall: 002 Area 14 Runoff (Boiler Room Area)

See Special Condition 21.

<sup>\*</sup>The sampling frequency for total iron and total copper shall be daily during discharge of non-chemical metal cleaning wastes. At all other times the sampling frequency shall be once per month. \*\*See Special Condition 18.

#### NPDES Permit No. IL0002186

#### Special Conditions

SPECIAL CONDITION 1. Flow shall be reported as a daily maximum and monthly average. In the event no discharge occurs during a given month, a statement of "No discharge" shall be reported on the DMR for that month.

SPECIAL CONDITION 2. The pH shall be in the range 6.0 to 9.0. The monthly minimum and monthly maximum values shall be reported on the DMR form.

<u>SPECIAL CONDITION 3</u>. The receiving waters are designated as Secondary Contact and Indigenous Aquatic Life Waters by Section 302.408, Illinois Administration Code, Title 35, Chapter 1, Subtitle C, as amended. These waters shall meet the following standard:

Temperatures shall not exceed 93°F (34°C) more than 5% of the time, or 100°F (37.8°C) at any time at the edge of the mixing zone which is defined by Rule 302.102 of the above regulations.

<u>SPECIAL CONDITION 4</u>. In lieu of the requirements of Section 302.211(d) and (e), Illinois Administrative Code, Title 35, Subtitle C, as amended, effluent shall not alone or in combination with other sources cause temperatures in the main channel of the Lower Des Plaines River at the I-55 Bridge to exceed the temperatures set forth in the following table, except in accordance with the allowable monthly excursions detailed below:

	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u> 1-15	<u>Apr</u> 16-30	<u>May</u> 1-15	<u>May</u> <u>16-30</u>	<u>June</u> 1-15	<u>June</u> 16-30	<u>July</u>	Aug	<u>Sept</u>	Oct	<u>Nov</u>	<u>Dec</u>
۰F	60	60	65	73	80	85	90	90	91	91	91	90	85	75	65

These standards may be exceeded by no more than 3°F during 2% of the hours in the 12-month period ending December 31, except that at no time shall Midwest Generation's plants cause the water temperature at the I-55 Bridge to exceed 93°F. (Midwest Generation's plants continue to be subject to the Secondary Contact Standards at the point of discharge).

<u>SPECIAL CONDITION 5.</u> Permittee shall comply with all temperature limitations as imposed by the Pollution Control Board's order in AS 96-10, dated October 3, 1996.

SPECIAL CONDITION 6. Total residual oxidant shall not be discharged from any single generating unit for more than two hours per day. The daily mean concentration of total residual oxidant shall be based on a concentration curve. The concentration curve shall be generated using grab samples with a sampling frequency of five minutes or less over the exposure time. The exposure time is defined to be from the point of first detectable measurement to the point of the last detectable measurement of total residual oxidant. Concentration curves shall be submitted with Discharge Monitoring Reports. The frequency and duration of the oxidant dosing period plus the amount of chlorine or bromine applied shall be reported on the Discharge Monitoring Reports. For reporting purposes, the daily discharge shall be the average of all non-zero values measured in a day and the monthly average shall be the average of all daily discharges. Discharge Monitoring Reports shall indicate whether chlorine or bromine compounds were used during the month.

For the purpose of determining compliance, the highest single instantaneous TRC/TRO concentration measured during compliance curve sampling on any day will be regarded as the daily maximum concentration. Total residual oxidant concentration shall be measured and reported in terms of total residual chlorine.

SPECIAL CONDITION 7. This facility has the following discharges of storm water associated with industrial activity:

The east oil water separator and switch house building roof drains, which discharge to the Chicago municipal combined sewer system.

SPECIAL CONDITION 8. There shall be no discharge of polychlorinated biphenyl compounds.

<u>SPECIAL CONDITION 9</u>. There shall be no discharge of complexed metal bearing wastestreams and associated rinses from chemical metal cleaning unless this permit has been modified to include the new discharge.

SPECIAL CONDITION 10. Intake monitoring at Crawford Generating Station pursuant to Section 316(b) of the CWA was not required by USEPA in letters to Commonwealth Edison Company (former owner & permittee) dated February 19, 1975 and June 1, 1976. It is determined that no intake monitoring or modification is being required by IEPA for reissuance of this NPDES Permit.

<u>SPECIAL CONDITION 11</u>. The discharge from Outfall D01 is limited to Chicago Sanitary and Ship Canal make-up water intake screen backwash, free from other discharges. Adequate maintenance of the intake screen system is required to prevent the discharge of floating debris collected on intake screens back to the canal.

#### NPDES Permit No. IL0002186

#### Special Conditions

<u>SPECIAL CONDITION 12.</u> Samples taken in compliance with the effluent monitoring requirements shall be taken at a point representative of the discharge, but prior to entry into the receiving stream.

SPECIAL CONDITION 13. The permittee shall record monitoring results on Discharge Monitoring Report Forms using one such form for each discharge each month.

The completed Discharge Monitoring Report forms shall be submitted to IEPA no later than the 28th day of the following month, unless otherwise specified by the permitting authority.

Discharge Monitoring Reports shall be mailed to the IEPA at the following address:

Illinois Environmental Protection Agency Division of Water Pollution Control Compliance Assurance Section 1021 N. Grand Avenue East Post Office Box 19276 Springfield, Illinois 62794-9276

SPECIAL CONDITION 14. The upset provisions of 40 CFR 122.41(n) are hereby incorporated by reference.

SPECIAL CONDITION 15. The Agency may modify this permit during its term to incorporate biomonitoring requirements and additional limitations or requirements based on the biomonitoring results. Modifications under this condition shall follow public notice and opportunity for hearing.

SPECIAL CONDITION 16. If an applicable effluent standard or limitation is promulgated under Sections 301(b)(2)(C) and (D), 304(b)(2), and 307(a)(2) of the Clean Water Act and that effluent standard or limitation is more stringent than any effluent limitation in the permit or controls a pollutant not limited in the NPDES Permit, the Agency shall revise or modify the permit in accordance with the more stringent standard or prohibition and shall so notify the permittee.

<u>SPECIAL CONDITION 17.</u> A discharge limit of 0.05 mg/l (instantaneous maximum) shall be achieved for total residual oxidant when bromine biocides are used for condenser biofouling control, in accordance with Special Condition 6. Total residual oxidant shall be measured and reported in terms of total residual chlorine. Construction of treatment facilities which may be necessary to meet the limit for total residual oxidant may not be started until a construction permit has been issued by the Agency.

SPECIAL CONDITION 18. The Agency has determined that the effluent limitations in this permit constitute BAT/BCT for storm water which is treated in the existing treatment facilities for purposes of this permit reissuance, and no pollution prevention plan will be required for such storm water. In addition to the chemical specific monitoring required elsewhere in this permit, the permittee shall conduct an annual inspection of the facility site to identify areas contributing to a storm water discharge associated with industrial activity, and determine whether any facility modifications have occurred which result in previously-treated storm water discharges no longer receiving treatment. If any such discharges are identified the permittee shall request a modification of this permit within 30 days after the inspection. Records of the annual inspection shall be retained by the permittee for the term of this permit and be made available to the Agency on request.

SPECIAL CONDITION 19. In the event the permittee shall require the use of water treatment additives not previously used in the station's main condensers, the permittee shall request a modification in the permit in accordance with the standard conditions, Attachment H.

SPECIAL CONDITION 20. The use or operation of this facility shall be by or under the supervision of a Certified Class K operator.

## SPECIAL CONDITION 21. STORM WATER POLLUTION PREVENTION PLAN (SWPPP)

- A. A storm water pollution prevention plan shall be developed by the permittee for the storm water associated with industrial activity at this facility. The plan shall identify potential sources of pollution which may be expected to affect the quality of storm water discharges associated with the industrial activity at the facility. In addition, the plan shall describe and ensure the implementation of practices which are to be used to reduce the pollutants in storm water discharges associated with industrial activity at the facility and to assure compliance with the terms and conditions of this permit.
- B. The plan shall be completed within 180 days of the effective date of this permit. Plans shall provide for compliance with the terms of the plan within 365 days of the effective date of this permit. The owner or operator of the facility shall make a copy of the plan available to the Agency at any reasonable time upon request.

#### NPDES Permit No. IL0002186

#### **Special Conditions**

- C. The permittee may be notified by the Agency at any time that the plan does not meet the requirements of this condition. After such notification, the permittee shall make changes to the plan and shall submit a written certification that the requested changes have been made. Unless otherwise provided, the permittee shall have 30 days after such notification to make the changes.
- D. The discharger shall amend the plan whenever there is a change in construction, operation, or maintenance which may affect the discharge of significant quantities of pollutants to the waters of the State or if a facility inspection required by paragraph G of this condition indicates that an amendment is needed. The plan should also be amended if the discharger is in violation of any conditions of this permit, or has not achieved the general objective of controlling pollutants in storm water discharges. Amendments to the plan shall be made within the shortest reasonable period of time, and shall be provided to the Agency for review upon request.
- E. The plan shall provide a description of potential sources which may be expected to add significant quantities of pollutants to storm water discharges, or which may result in non-storm water discharges from storm water outfalls at the facility. The plan shall include, at a minimum, the following items:
  - A topographic map extending one-quarter mile beyond the property boundaries of the facility, showing: the facility, surface water bodies, wells (including injection wells), seepage pits, infiltration ponds, and the discharge points where the facility's storm water discharges to a municipal storm drain system or other water body. The requirements of this paragraph may be included on the site map if appropriate.

### 2. A site map showing:

- i. The storm water conveyance and discharge structures;
- An outline of the storm water drainage areas for each storm water discharge point;
- iii. Paved areas and buildings;
- iv. Areas used for outdoor manufacturing, storage, or disposal of significant materials, including activities that generate significant quantities of dust or particulates.
- v. Location of existing storm water structural control measures (dikes, coverings, detention facilities, etc.);
- vi. Surface water locations and/or municipal storm drain locations
- vii. Areas of existing and potential soil erosion:
- viii. Vehicle service areas;
- ix. Material loading, unloading, and access areas.
- 3. A narrative description of the following:
  - The nature of the industrial activities conducted at the site, including a description of significant materials that are treated, stored or disposed of in a manner to allow exposure to storm water;
  - Materials, equipment, and vehicle management practices employed to minimize contact of significant materials with storm water discharges;
  - iii. Existing structural and non-structural control measures to reduce pollutants in storm water discharges;
  - iv. Industrial storm water discharge treatment facilities:
  - v. Methods of onsite storage and disposal of significant materials;
- 4. A list of the types of pollutants that have a reasonable potential to be present in storm water discharges in significant quantities.
- 5. An estimate of the size of the facility in acres or square feet, and the percent of the facility that has impervious areas such as pavement or buildings.
- 6. A summary of existing sampling data describing pollutants in storm water discharges.

#### NPDES Permit No. IL0002186

#### **Special Conditions**

- F. The plan shall describe the storm water management controls which will be implemented by the facility. The appropriate controls shall reflect identified existing and potential sources of pollutants at the facility. The description of the storm water management controls shall include:
  - 1. Storm Water Pollution Prevention Personnel Identification by job titles of the individuals who are responsible for developing, implementing, and revising the plan.
  - Preventive Maintenance Procedures for inspection and maintenance of storm water conveyance system devices such as oil/water separators, catch basins, etc., and inspection and testing of plant equipment and systems that could fail and result in discharges of pollutants to storm water.
  - Good Housekeeping Good housekeeping requires the maintenance of clean, orderly facility areas that discharge storm water.
     Material handling areas shall be inspected and cleaned to reduce the potential for pollutants to enter the storm water conveyance system.
  - 4. Spill Prevention and Response Identification of areas where significant materials can spill into or otherwise enter the storm water conveyance systems and their accompanying drainage points. Specific material handling procedures, storage requirements, spill clean up equipment and procedures should be identified, as appropriate. Internal notification procedures for spills of significant materials should be established.
  - 5. Storm Water Management Practices Storm water management practices are practices other than those which control the source of pollutants. They include measures such as installing oil and grit separators, diverting storm water into retention basins, etc. Based on assessment of the potential of various sources to contribute pollutants, measures to remove pollutants from storm water discharge shall be implemented. In developing the plan, the following management practices shall be considered:
    - Containment Storage within berms or other secondary containment devices to prevent leaks and spills from entering storm water runoff;
    - Oil & Grease Separation Oil/water separators, booms, skimmers or other methods to minimize oil contaminated storm water discharges;
    - iii. Debris & Sediment Control Screens, booms, sediment ponds or other methods to reduce debris and sediment in storm water discharges;
    - iv. Waste Chemical Disposal Waste chemicals such as antifreeze, degreasers and used oils shall be recycled or disposed of in an approved manner and in a way which prevents them from entering storm water discharges.
    - v. Storm Water Diversion Storm water diversion away from materials manufacturing, storage and other areas of potential storm water contamination;
    - vi. Covered Storage or Manufacturing Areas Covered fueling operations, materials manufacturing and storage areas to prevent contact with storm water.
  - 6. Sediment and Erosion Prevention The plan shall identify areas which due to topography, activities, or other factors, have a high potential for significant soil erosion and describe measures to limit erosion.
  - 7. Employee Training Employee training programs shall inform personnel at all levels of responsibility of the components and goals of the storm water pollution control plan. Training should address topics such as spill response, good housekeeping and material management practices. The plan shall identify periodic dates for such training.
  - 8. Inspection Procedures Qualified plant personnel shall be identified to inspect designated equipment and plant areas. A tracking or follow-up procedure shall be used to ensure appropriate response has been taken in response to an inspection. Inspections and maintenance activities shall be documented and recorded.
- G. The permittee shall conduct an annual facility inspection to verify that all elements of the plan, including the site map, potential pollutant sources, and structural and non-structural controls to reduce pollutants in industrial storm water discharges are accurate. Observations that require a response and the appropriate response to the observation shall be retained as part of the plan. Records documenting significant observations made during the site inspection shall be submitted to the Agency in accordance with the reporting requirements of this permit.

#### NPDES Permit No. IL0002186

#### Special Conditions

- H. This plan should briefly describe the appropriate elements of other program requirements, including Spill Prevention Control and Countermeasures (SPCC) plans required under Section 311 of the CWA and the regulations promulgated thereunder, and Best Management Programs under 40 CFR 125.100.
- The plan is considered a report that shall be available to the public under Section 308(b) of the CWA. The permittee may claim
  portions of the plan as confidential business information, including any portion describing facility security measures.
- J. The plan shall include the signature and title of the person responsible for preparation of the plan and include the date of initial preparation and each amendment thereto.

#### REPORTING

- K. The facility shall submit an annual inspection report to the Illinois Environmental Protection Agency. The report shall include results of the annual facility inspection which is required by Part G of the Storm Water Pollution Prevention Plan of this permit. The report shall also include documentation of any event (spill, treatment unit malfunction, etc.) which would require an inspection, results of the inspection, and any subsequent corrective maintenance activity. The report shall be completed and signed by the authorized facility employee(s) who conducted the inspection(s).
- L. The first report shall contain information gathered during the one year time period beginning with the effective date of coverage under this permit and shall be submitted no later than 60 days after this one year period has expired. Each subsequent report shall contain the previous year's information and shall be submitted no later than one year after the previous year's report was due.
- M. Annual inspection reports shall be mailed to the following address:

Illinois Environmental Protection Agency Division of Water Pollution Control Compliance Assurance Section Annual Inspection Report 1021 N. Grand Avenue East P.O. Box 19276 Springfield, Illinois 62794-9276

N. If the facility performs inspections more frequently than required by this permit, the results shall be included as additional information in the annual report.

#### ATTACMBARBET N

#### Steenage Conditions

#### Definitions

Act means the Illinois Environmental Protection Act. Ch. 111 1/2 III, Rev. Stat., Sec. 1001-1052 as Amended.

Agency means the Illinois Environmental Protection Agency.

Board means the Illinois Pollution Control Board.

Clean Water Act (formerly referred to as the Federal Water Pollution Control Act) means Pub. L. 92-500, as amended, 33 U.S.C. 1251 et seq.

NPDES (National Pollutant Discharge Elimination System) means the national program for issuing, modifying, nevoking and ressuing, terminating, monitoring and enforcing permits, and imposing and enforcing pretreatment requirements, under Sections 307, 402, 318 and 405 of the Clean Water Act.

USEPA means the United States Environmental Protection Agency.

Daily Discharge means the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in units of meas, the "daily discharge" is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurements, the "daily discharge" is calculated as the average measurement of the pollutant over the day.

Maximum Daily Discharge Limitation (daily maximum) means the highest allowable daily discharge.

Average Monthly Discharge Limitation (30 day average) means the highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.

Average Weekly Discharge Limitation (7 day average) means the highest allowable average of delty discharges over a calendar week, calculated as the sum of all delty discharges measured during a calendar week divided by the number of delty discharges measured during that week.

Best Management Practices (BMPs) means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the State. BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

Aliquot means a sample of specified volume used to make up a total composite sample.

Grab Sample means an individual sample of at least 100 millisters collected at a randomlyselected time over a period not exceeding 15 minutes.

24 Hour Composite Sample means a combination of at least 3 sample aliquots of at least on milkiters, collected at periodic intervals during the operating hours of a facility over a 24-hour period.

8 Hour Composite Sample means a combination of at less 3 sample sliquots of at least 100 milliters, collected at periodic intervals during the operating hours of a facility over an 8-hour period.

Flow Proportional Composite Sample means a combination of sample aliquots of at least 100 millitrars collected at periodic intervats such that either the time interval between each aliquot or the volume of each aliquot or tipe proportional to either the stream flow at the time of sampling or the total stream flow since the collection of the previous aliquot.

- Duty to comply. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action, permit termination, revocation and reissiance, modification, or for denial of a permit renewal application. The permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic poslutants within the time provided in the regulations that establish these standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.
- (2) Duty to reapply, if the permittee wishes to continue an activity regulated by this permit after the expetition date of this permit, the permittee must apply for and obtain a new permit if the permittee submits a proper application as required by the Agency no later than 180 days prior to the expiration date, this permit shall continue in full force and effect until the final Agency decision on the application has been made.
- (3) Need to halt or reduce activity not a defense. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
- (4) Duty to mittgate. The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.
- (5) Proper operation and maintenance. The permittae shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed at used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate absoratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up, or auxiliary facilities, or similar systems only when necessary to achieve compliance with the conditions of the permit.

6) Permit actuets. This parmit may be modified, revoked and research of seminant for cause by the Agency pursuant to 40 CFR 122.52. The filtering a seminant by the permittee for a permit modification, revocation and ressurance or permitted of a parmit modification of planned changes or enticipated noncompliance, does not filter any permit condition.

26.5

- (7) Property rights. This permit does not convey any property rights of any exclusive privilege.
- (8) Duty to provide information. The permittee shall furnish to the Agency within a reasonable time, any information which the Agency may request to determine whether cause exists for modifying, revoking and resisting, or terminating this permit, or to determine compliance with the permit. The permittee shall also furnish to the Agency, upon request, copies of records required to be kept by this permit.
- Inspection and entry. The permittee shall allow an authorized representative of the Agency, upon the presentation of credentials and other documents as may be required by (aw., to):
  - Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
  - Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
  - ic) Inspect at resonable times any facilities, equipment lincluding monitoring and control equipment, practices, or operations regulated or required under this permit; and
  - (d) Sample or morator at reasonable times, for the purpose of assuring permit compliance, or as otherwise authorized by the Act, any substances or paremeters at any location.
- (10) Monitoring and records.
  - Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.
  - (b) The permittee shall retein records of all monitoring information, including all calibration and maintenance records, and all onginal strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of this permit, measurement, report or application. This period may be extended by request of the Agency at any time.
  - (c) Records of monitoring information shall include:
    - (1) The date, exact place, and time of sampling or measurements;
    - The individualist who performed the sampling or measurements;
    - (3) The date(s) analyses were performed;
    - (4) The individual(s) who performed the analyses:
    - (5) The analytical techniques or methods used; and
    - (6) The results of such analyses.
  - (d) Monitoring must be conducted according to test procedures approved under 4D CFR Part 136, unless other test procedures have been specified in this permit. Where no test crocedure under 4D CFR Part 136 has been approved, the permittee must submit to the Agency a test method for approved. The permittee shall calibrate and perform maintenance procedures on all monitoring and analytical instrumentation at intervals to ensure accuracy of measurements.
- (11) Signatory requirement. All applications, reports or information submitted to the Agency shall be signed and certified.
  - (a) Application, All permit applications shall be signed as follows:
    - For a corporation: by a principal executive officer of at least the level of vice president or a person or position having overall responsibility for environmental matters for the corporation;
    - (2) For a pertnership or sole proprietorship: by a general pertner or the proprietor, respectively; or
    - (3) For a municipality, State, Federal, or other public ageocy: by either a principal executive officer or ranking elected official.
  - (b) Reports: All reports required by permits, or other information requested by the Agency shall be signed by a person described in paragraph (a) or by a duly authorized representative of that person. A person is a duly authorized representative only if:
    - The authorization is made in writing by a person described in paragraph (a); and
    - (2) The authorization specifies either an individual or a position responsible for the overall operation of the facility, from which the discharge originates, such as a plant manager, superintendent or person of equivalent responsibility; and
    - (3) The written authorization is submitted to the Agency.

col. Changes of Authorization. If an authorization under (b) is no longer accurate because a different individual or position his responsibility for the oversit operation of the facility, a new authorization starting the requirements of (b) must be submitted to the Agency prior to or together with any reports, information, or applications to be signed by an authorized representative.

#### (12) Reporting requirements.

- Flanned changes. The permitted shall give notice to the Agency as soon as possible of any planned physical alterations or additions to the permitted facility.
- b) Anticipated noncomplience. The permittee shall give advance notice to the Agency of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.
- (c) Compliance achedules. Reports of compliance or noncompliance with, or any progress reports on, interim and finel requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.
- Idi Monitoring reports, Monitoring results shall be reported at the intervals specified elsewhere in this permit.
  - Monitoring results must be reported on a Discharge Monitoring Report (DMR).
  - (2) If the permittee monitors any pollutant more frequently than required by the permit, using test procedures approved under 40 CFR 138 or as specified in the permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR.
  - (3) Calculations for all limitations which require averaging of measurements shall utilize an enthmatic mean unless otherwise specified by the Agency in the permit.
- Twenty-four hour reporting. The permittee shall report any noncompliance which may endanger health or the environment. Any information shall be provided drailly within 24 hours from the time the permittee becomes aware of the circumstances. A written submission shall called the circumstances, the written submission shall cantain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times; and if the noncompliance has not been corrected, the sinscipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance. The following shall be included as information which must be reported within 24 hours:
  - Any unanticipated bypass which exceeds any effluent limitation in the permit;
  - (2) Violation of a maximum deity discharge limitation for any of the pollutants listed by the Agency in the permit to be reported within 24 house.

The Agency may waive the written report on a case-by-case basis if the oral report has been received within 24 hours.

- (f) Other noncompliance. The permittee shall report all instances of noncompliance not reported under paragraphs (12)(c), (d), or lel, at the time monitoring reports are submitted. The reports shall contain the information listed in paragraph (12)(e).
- ig) Other information. Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application, or in any report to the Agency, it shall promptly submit such facts or information.
- (13) Transfer of permits. A permit may be automatically transferred to a new permittee if:
  - 1a) The current permittee notifies the Agency at least 30 days in advance of the proposed transfer date;
  - 'b) The notice includes a written agreement between the existing and new permittees containing a specific date for transfer of permit responsibility, coverage and liability between the current and new permittees; and
  - (c) The Agency does not notify the existing permittee and the proposed new permittee of its intent to modify or revoke and reissue the permit. If this notice is not received, the transfer is effective on the data specified in the agreement.
- (14) All manufacturing, commercial, mining, and silvicultural dischargers must notify the Agency as soon as they know or have reason to believe:
  - a) That any activity has occurred or will occur which would result in the discharge of any toxic pollutant identified under Section 307 of the Clean Water Act which is not limited in the permit, if that discharge will exceed the highest of the following notification levels:
    - (1) One hundred micrograms per liter (100 ug/9;

(2) Two hundred micrograms per liter (200 ug/l) for acrolein and/: acrylonstrie; five Bundred micrograms per liter (500 ug/8 for 2,4-dintrophenol and for 2-methyl-4,8-dintrophenol; and one milligramper liter (1 mg/l) for antimony;

- Same Same

- (3) Five (5) times the maximum concentration value reported for that pollutant in the NPDES permit application; or
- (4) The level established by the Agency in this permit.
- (b) That they have begun or expect to begin to use or manufacture as an intermediate or final product or byproduct any toxic pollutant which was not reported in the NPDES permit application.
- (15) All Publicly Owned Treatment Works (POTWs) must provide adequate notice to the Agency of the following:
  - (a) Any new introduction of pollutants into that POTW from an endirection discharger which would be subject to Sections 301 or 306 of the Clear Water Act if it were directly discharging those pollutants; and ASSAP
  - (b) Any substantial change in the volume or character of pollutents-being introduced into that POTW by a source introducing pollutants, into the POTW at the time of issuence of the permit.
  - (c) For purposes of this paragraph, adequate notice shall include information on (i) the quality and quantity of effluent introduced into the POTW, and bill any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW.
- (16) If the permit is issued to a publicity owned or publicity regulated treatment works, the permittee shall require any industrial user of such treatment works to comply with federal requirements concerning:
  - User charges pursuant to Section 204(b) of the Clean Water Act, and applicable regulations appearing in 40 CFR 35;
  - (2) Toxic pollutant effluent standards and pretreatment standards pursuant to Section 307 of the Clean Water Act; and
  - (3) Inspection, monitoring and entity pursuant to Section 308 of the Clean Water Act.
- (17) If an applicable standard or limitation is promulgated under Section 301(b)(2)(c) and (D), 304(b)(2), or 307(a)(2) and that affluent standard or limitation is more stringent than any affluent limitation in the permit, or controls a pollutant not limited in the permit, the permit shall be promptly modified or revoked, and ressued to conform to that affluent standard or limitation.
- (18) Any authorization to construct assed to the permittee pursuant to 35 lil. Adm. Code 309.154 is hereby incorporated by reference as a condition of this permit.
- (19) The permittee shall not make any false statement, representation or cerufication in any application, record, report, plan or other document submitted to the Agency or the USEPA, or required to be maintained under this permit.
- 120) The Clean Water Act provides that any person who violates a permit condition implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the Clean Water Act is subject to a civil penalty not to exceed \$10,000 per day of such violation. Any person who wrillfully or negligently violates permit conditions implementing Sections 301, 302, 306, 307, or 308 of the Clean Water Act is subject to a fine of not less than \$2,500, nor more than \$25,000 per day of violation, or by impresonment for not more than one year, or both.
- 1211 The Clean Water Act provides that any person who faisthes, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under permit shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by impresonment for not more than 6 months per violation, or by both.
- (22) The Clean Water Act provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit shall, including monitoring reports or reports of compliance or non-compliance shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by impresonment for not more than 6 months per violation, or by both.
- (23) Coffected screening, sturnes, skudges, and other solids shall be disposed of in such a manner as to prevent entry of those wastes (or runoff from the westes) into waters of the State. The proper authorization for such disposal shall be obtained from the Agency and is incorporated as part hereof by reference.
- (24) In case of conflict between these standard conditions and any other condition(s) included in this permit, the other condition(s) shall govern.
- 125) The permittee shall comply with, in addition to the requirements of the permit, all applicable provisions of 35 lft. Adm. Code. Subtitle C. Subtitle D. Subtitle E. and all applicable orders of the Board.
- [28] The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit is held invalid, the remaining provisions of this permit shall continue in full force and affect.

### ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

July 28, 2010

Midwest Generation	)	
Crawford Generating Station	)	
	)	
	)	
	)	
Petitioner,	)	
	)	
v.	)	IEPA – 11-01
·	)	(Provisional Variance-Water)
ILLINOIS ENVIRONMENTAL	)	
PROTECTION AGENCY,	)	
	)	
Respondent.	)	

Re: Provisional Variance From Effluent Limits Contained in NPDES Permit IL0002186 For Outfall CO1

### Dear Ms. Brock:

The Illinois Environmental Protection Agency (Agency) has completed its technical review of the attached provisional variance request, dated July 26, 2010 (Attachment A) submitted by the Midwest Generation for its Crawford Generating Station. Midwest Generation has requested a variance so that it will be able to remove water from the basements of its turbine room and crusher house. Water entered the basements as the result of a severe storm that occurred on July 23 and July 24 in the Chicago area.

Based on its review, the Agency GRANTS the Midwest Generation a provisional variance for its Crawford Generating Station, subject to the specific conditions set forth below.

### Background

Midwest Generation owns and operates a coal-fired steam electric generating facility (Crawford Generating Station) located in Chicago, Illinois. On July 23 and July 24, 2010, the Chicago area was hit by a very severe thunderstorm that resulted in some areas receiving over 7 inches of rain. This storm caused the basements of the turbine building and the crusher house at the Crawford Generating Station to flood, which in turn caused both units of the generating plant to trip off. Midwest Generation estimates that

approximately 3.5 million gallons of water are in the basements. The existing treatment plant lacks the capacity to provide full treatment to the flood waters in the basements, and all storage capacity at the plant has been utilized. Midwest Generation is therefore seeking a variance to allow it to discharge this water back to the Chicago and Sanitary Canal without the water receiving full treatment. The provisional variance requested is only for Outfall CO1 (Recirculating Wastewater Treatment System Blowdown) and only for the parameters of Total Suspended Solids (TSS) and Oil and Grease, Midwest Generation will continue to meet all other effluent parameters of NPDES permit IL0002186 (Attachment B).

### Relief Requested

The Midwest Generation Crawford Generating Station seeks a provisional variance from the effluent limits for TSS and Oil and Grease required in NPDES permit IL0002186 for Outfall C01. Based on the very poor canal water quality associated with the storm, Midwest Generation anticipates that the TSS will be in the 50-100 mg/L range, and that the oil and grease concentration will be in the 30-50 mg/L range. Current permit limits for the parameters requested in this variance for Outfall C01 require:

Parameter	Monthly Avg. (mg/l)	Daily Max. (mg/l)
TSS	15	30
Oil and Greas	e 15	20

### Agency Determinations

The Agency has reviewed the requested provisional variance and has concluded the following:

- 1. Any environmental impact from the requested relief shall be closely monitored, and the Agency shall be immediately notified of any adverse impacts.
- 2. No reasonable alternatives appear available;
- 3. No public water supplies should be affected;
- 4. No federal regulations will preclude the granting of this request; and
- Midwest Generation will face an arbitrary and unreasonable hardship if the request is not granted.

### Conditions

The Agency hereby GRANTS Midwest Generation Crawford Generating Station a provisional variance from the effluent limits of TSS and Oil and Grease required in NPDES Permit IL0002186 for Outfall C01, subject to the following conditions:

- A. The provisional variance shall begin on July 27, 2010, and shall end no later than August 10, 2010.
- B. Midwest Generation shall provide the best operation of its treatment plant to produce the best effluent possible at all times. At no times shall the effluent exceed TSS of 100 mg/l and Oil and Grease of 50 mg/l.
- C. Midwest Generation shall closely monitor the Chicago Sanitary and Ship Canal and immediately notify the Agency of any adverse environmental impacts as a result of this discharge.
- D. Midwest Generation shall notify Roger Callaway of the Agency by telephone at 217/782-9720 when the discharge specified in this provisional variance is completed and the facility returns to normal operation. Written confirmation shall be sent within five days to the following address:

Illinois Environmental Protection Agency Bureau of Water - Water Pollution Control Attention: Roger Callaway 1021 North Grand Avenue East, MC #19 Springfield, Illinois 62794-9276

E. Midwest Generation shall sign a certificate of acceptance of this provisional variance and forward that certificate to Roger Callaway at the address indicated above within one day of the date of this order. The certification should take the following form:

I (We)_and conditions of				
Y	nick Hardwards for ramifolds of Bassanana			
Petitioner '				
Authorized Agent				
Title				
Date				

Midwest Generation shall continue to monitor all parameters and all comply with all other conditions specified in its NPDES Permit No. IL0002186.

### Conclusion

The Agency grants this provisional variance in accordance with its authority contained in Sections 35(b), 36 (c), and 37(b) of the Illinois Environmental Protection Act (415 ILCS 5/35(b), 36(c), and 37(b) (2004). The decision to grant this provisional variance is not intended to address compliance with any other applicable laws or regulations.

Sincerely,

John J. Kim

Chief Legal Counsel

cc: Marcia Willhite

Roger Callaway Vera Herst From: (773) 650-5543 GERALD DELANEY MIDWEST GENERATION Crawford Station 3501 S Pulaski Rd. CHICAGO, IL 60623

SHIP TO: (312) 353-2000

Origin ID: BDFA



**BILL SENDER** 

Ship Date: 02DEC11 ActWgt. 1.0 LB CAD: 2198669/INET3210

Delivery Address Bar Code



Ref#

Ms. Diane Sharrow **U.S.Environmental Protection Agency** Region 5 77 West Jackson Blvd., LR-8J Chicago, IL 60604

Invoice # PO# Dept#

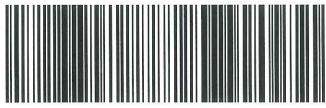
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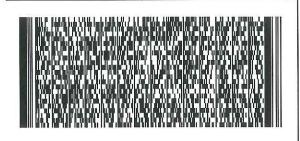
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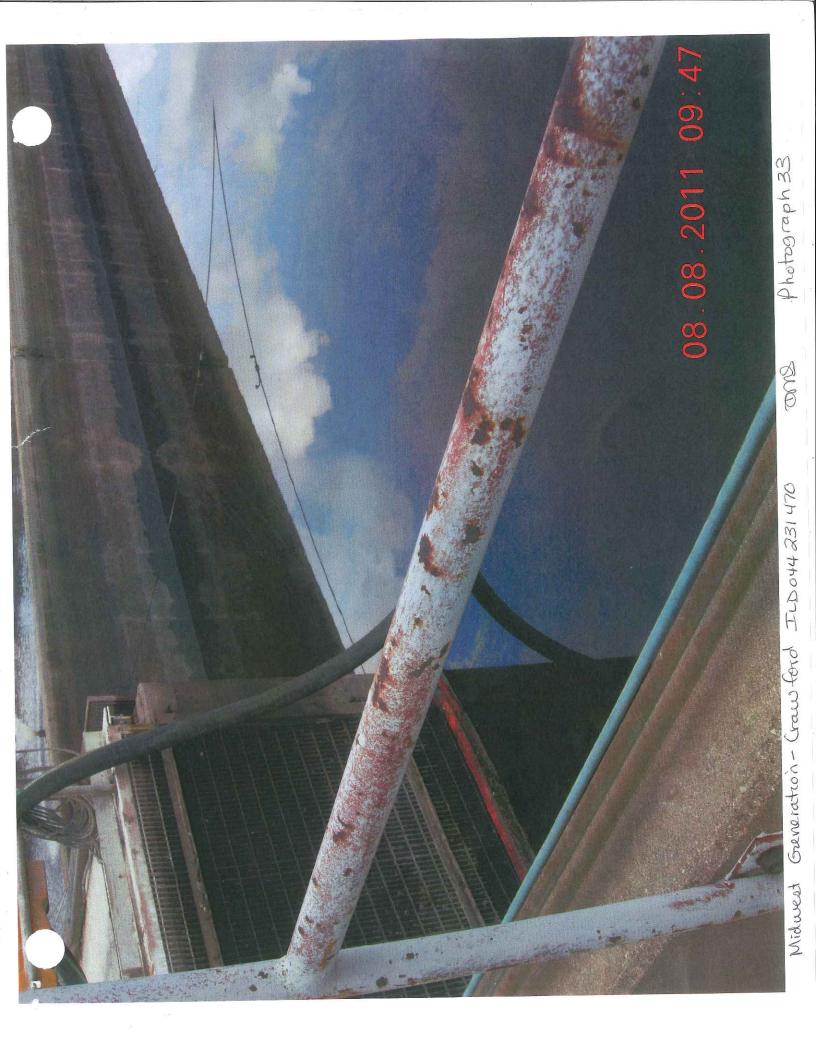
1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.

2. Fold the printed page along the horizontal line.

3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.

Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com.FedEx will not be responsible for any claim in excess of \$100 per package, whether the result of loss, damage, delay, non-delivery,misdelivery,or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental consequential, or special is limited to the greater of \$100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is \$500, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.



bcc: Susan Tennenbaum, ORC



### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5 77 WEST JACKSON BOULEVARD CHICAGO, IL 60604-3590

OCT 1 4 2011

REPLY TO THE ATTENTION OF:

LR-8I

### <u>CERTIFIED MAIL 7009 1680 0000 7665 4302</u> <u>RETURN RECEIPT REQUESTED</u>

Mr. Donald A. Isaacs Environmental Specialist Midwest Generation LLC Crawford Generation Station 3501 South Pulaski Road Chicago, Illinois 60623-4987

> Re: Information Request Midwest Generation LLC Crawford Generation Station EPA ID. NO.: ILD 044 231 470

Dear Mr. Isaacs:

On August 8, 2011, a representative of the U.S. Environmental Protection Agency (EPA) inspected the Crawford Generation Station facility owned by Midwest Generation LLC (Midwest Generation or you) located in Chicago, Illinois (the facility). The purpose of the inspection was to evaluate Midwest Generation's compliance with certain provisions of the Resource Conservation and Recovery Act (RCRA): specifically, those regulations related to the generation, treatment, and storage of hazardous waste, including used oil.

By this letter, EPA is issuing this Information Request to you under Section 3007 of RCRA, 42 U.S.C. § 6927. Section 3007 authorizes the Administrator of EPA to require you to submit certain information. This Information Request requires Midwest Generation to submit certain information relating to the generation of hazardous wastes and used oil at the facility referenced above by EPA Identification Number and located in Chicago, Illinois. We are requiring this information to determine Midwest Generation's compliance status under Sections 3002 through 3006 of RCRA, 42 U.S.C. §§ 6922 through 6926, the regulations at 40 C.F.R. §§ 260-265, and under the requirements of the Illinois Administrative Code (IAC). EPA may use the submitted information in an administrative, civil, or criminal action.

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For delivery information visit our website at www.usps.coms

Postage

Certified Fee

Gendorsement Required)

Restricted Delivery Fee
(Endorsement Required)

MR. Donald A. Issacs

Midwest Gernation LLC

Crawford Generation Station

3501 South Pulaski Road

Chicago, Illinois 60623-4987

The enclosure specifies the information you must submit. You must submit this information within <u>30 CALENDAR DAYS</u> of receiving this request to the United States Environmental Protection Agency, at the following address:

Diane M. Sharrow
Land and Chemicals Division
RCRA Branch
Compliance Section 1
77 West Jackson Boulevard, LR-8J
Chicago, Illinois 60604

The information must be provided notwithstanding its possible characterization as confidential information or trade secrets. You may, under 40 C.F.R. Part 2, Subpart B, assert a business confidentiality claim covering all or part of the information in the manner described in 40 C.F.R. § 2.203(b). We will disclose the information covered by a business confidentiality claim only to the extent and by means of the procedures at 40 C.F.R. Part 2, Subpart B. You must make any request for confidentiality when you submit the information since any information not so identified may be made available to the public without further notice.

Under Section 3008 of RCRA, 42 U.S.C. § 6928, and 40 C.F.R. Part 19, EPA is authorized to seek civil penalties of up to \$37,500 per day against Midwest Generation for failing or refusing to submit all of the information specified in this Information Request. Further, under 18 U.S.C. § 1001, you may be fined or imprisoned for up to five years for knowingly or willfully: (1) falsifying, concealing, or covering up a material fact; (2) making any material false, fictitious, fraudulent statement or representation; or (3) making or using any false writing or document knowing it contains any materially false, fictitious, or fraudulent statement.

Midwest Generation must submit all information specified in this Information Request under the signature of an authorized representative certifying that the information is true and complete to the best of the signatory's knowledge and belief. Should the signatory find, at any time after submitting the requested information, that any portion of the submitted information is false, misleading, or incomplete, the signatory must immediately notify Ms. Sharrow at the above address.

This Information Request is not subject to the Paperwork Reduction Act, 44 U.S.C. §§ 3501 et seq., because it seeks collection of information from specific individuals or entities as part of an administrative action or investigation.

You should direct questions about this Information Request to Diane Sharrow at (312) 886-6199.

Lorna M. Jereza, Chief Compliance Section 1

Enclosure

cc: Todd.Marvel@illinois.gov

### INFORMATION REQUEST

### **Instructions:**

Each item of this Information Request refers and relates to Midwest Generation LLC, and the Crawford Generating Station (Midwest Generation or you) and/or its facility located at 3501 South Pulaski Road, Chicago, Illinois (the facility). You must respond separately to each item of this Information Request. Precede each response with the number of the Information Request item to which it corresponds. For each document produced in response to this Information Request, specify on the document, or in some other reasonable manner, the number of the item to which it responds.

### Definitions:

The following definitions apply to this Information Request. The following definitions have been taken from the Illinois Administrative Code Part 702, et seq. Corresponding federal definitions may be found in the Code of Federal Regulations, 40 C.F.R. § 260.10.

- 1. "Authorized representative" means the person responsible for the overall operation of a facility or an operational unit (i.e., part of a facility), e.g., the plant manager, superintendent, or person of equivalent responsibility.
- 2. "Certification" means a statement of professional opinion based upon knowledge and belief.
- "Facility personnel" means all persons who work at, or oversee the operations of, a
  hazardous waste facility, and whose actions or failure to act may result in
  noncompliance.
- 4. "Operator" means the person responsible for the overall operation of a facility.
- 4. "Owner" means the person that owns a facility or part of a facility.
- 5. "Person" means an individual, trust, firm, joint stock company, federal agency, corporation (including a government corporation), partnership, association, state, municipality, commission, political subdivision of a state, or any interstate body.
- 6. "Personnel" or "facility personnel" means all persons who work at or oversee the operations of a hazardous waste facility and whose actions or failure to act may result in noncompliance with 35 Ill. Adm. Code § 724 or 725.
- 7. "RCRA" means the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976, as amended (42 U.S.C. 6901 et seq.).

### **Items of Request:**

- 1. Identify all persons consulted in preparing the answers to this Request for Information.
- 2. Provide the full name and title for each person identified in response to Item 1.
- 3. Provide a complete copy of engineering plans or specifications for the two ponds or impoundments identified in the attached aerial photograph.
- 4. Provide a diagram or specifications of any piping utilized to place solid or liquid materials or wastes into the two ponds or impoundments identified in the attached aerial photograph.
- 5. Provide an inventory or list of all solid or liquid materials or wastes placed into the two ponds or impoundments in the last year via piping, as well as any other mechanism, device or method of placement.
- 6. Identify the origin of all solid or liquid materials or wastes placed into the two ponds or impoundments in the last year via piping, as well as any other mechanism, device or method of placement.
- 7. Specify the date(s) in the past three years when any solid or liquid materials or wastes were placed in the two ponds or impoundments identified in the attached aerial photograph.
- 8. Provide a copy of any analysis of any solid or liquid materials or wastes that have been placed in the two ponds or impoundments identified in the attached aerial photograph.
- 9. Provide a diagram or specifications of any piping, mechanism, device or method utilized to remove any solid or liquid materials or wastes from the two ponds or impoundments identified in the attached aerial photograph.
- 10. Identify all solid or liquid materials or wastes that have been removed in the past three years from the two ponds or impoundments identified in the attached aerial photograph.
- 11. Identify the origin of all solid or liquid materials or wastes that have been removed from the two ponds or impoundments in the past three years via piping, as well as by any other mechanism, device or method of placement.
- 12. Specify the date(s) in the past three years when any solid or liquid materials or wastes that were removed from the two ponds or impoundments identified in the attached aerial photograph.

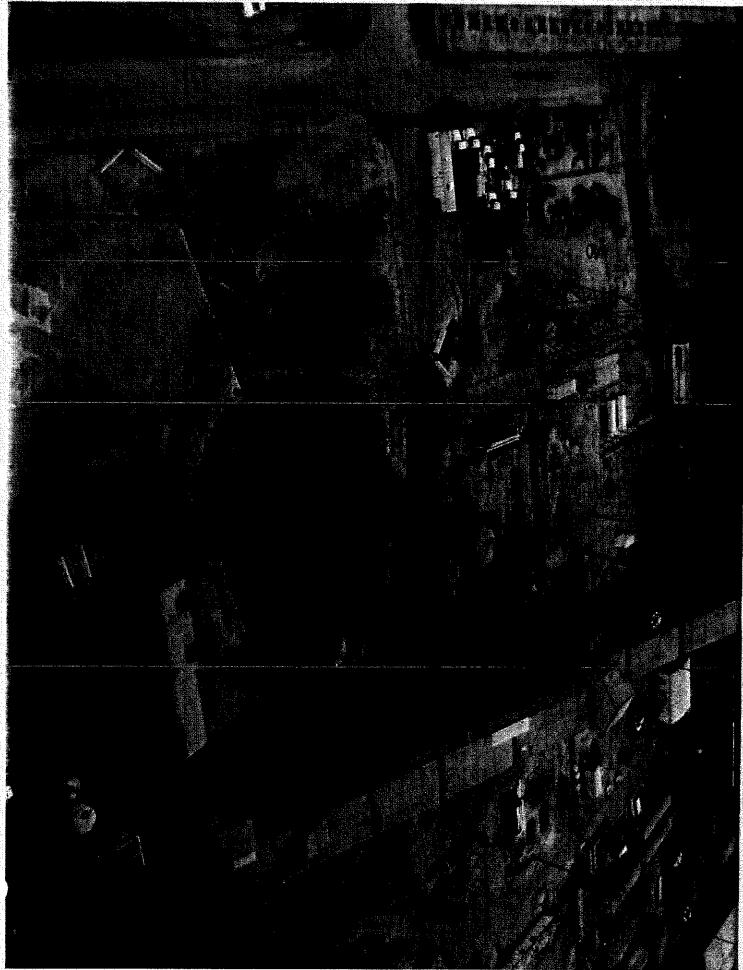
- 13. Provide a copy of any analysis of any solid or liquid materials or wastes that have been removed from the two ponds or impoundments identified in the attached aerial photograph.
- 14. Identify where all solid or liquid materials or wastes removed in the past three years from the two ponds or impoundments identified in the attached aerial photograph were sent, and whether the solid or liquid materials or wastes were treated, recycled or disposed.
- 15. Provide the names and employers of all personnel who placed or removed solid or liquid materials or wastes in the two ponds or impoundments identified in the attached aerial photograph in the past three years.
- 17. Identify the names and purpose of all the structures located on the two ponds or impoundments, or immediately adjacent to or on the perimeter of the two ponds or impoundments, including any manholes, wells, or subterranean structures.
- 18. Provide the following certification by a responsible corporate officer:

I certify under the penalty of law that I have examined and am familiar with the information submitted in responding to this information request for production of documents. Based on my review of all relevant documents and inquiring of those individuals immediately responsible for providing all relevant information and documents, I believe that the information submitted is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

### **ATTACHMENT**

MIDWEST GENERATION LLC, CRAWFORD GENERATING STATION 3501 South Pulaski Road, Chicago, Illinois USEPA ID. NO.: ILD 044 231 470

ILD 044 231470 Midwest Generation



ILD 044 Midwest Generation 470



United States Environmental Protection Agency Diane M. Sharrow Land and Chemicals Division RCRA Branch Compliance Section 1 77 West Jackson Boulevard, LR-8J Chicago, IL 60604

CERTIFIED MAIL # 7003 3110 0001 1239 5608

Subject: Response to Information Request dated October 14, 2011

Dear Ms. Sharrow:

Midwest Generation's Crawford Generation Station is in receipt of your above referenced information request and provides the following answers to the items requested. Please contact me at 773-650-5412 if you have any questions.

Sincerely,

Michael Hanrahan

Managing Director - Fisk and Crawford Stations

### MIDWEST GENERATION, LLC'S RESPONSE TO INFORMATION REQUEST

1. Identify all persons consulted in preparing the answers to this Request for Information.

**RESPONSE:** See response to Request No. 2 below.

2. Provide the full name and title for each person identified in response to Item 1.

### RESPONSE:

### Staff of Fisk and Crawford Stations, Midwest Generation, LLC

Donald A. Isaacs Environmental Specialist Gerald Delaney Engineering Manager Pete Errichiello Operations Manager

Robert Chmieleski Environmental Specialist (Now at Waukegan)

Elizabeth Alvarez Chemical Specialist
Mike Connolly Project Manager
Cliff Malatase Relance of Plant Engin

Cliff Malatase Balance of Plant Engineer Ken Wohler Coal Handling Supervisor

Michael Hanarahan Managing Director – Fisk and Crawford Stations

### Staff of Midwest Generation, LLC

Christopher M. Foley Counsel, Midwest Generation, LLC

Basil Constantelos Managing Director

Maria Race Environmental Engineering Program Director,

Luke Ford Environmental Engineer, Sr

Joe Bocian Project Management

Robert Chmieleski Environmental Specialist – Waukegan Station

### **Outside Environmental Counsel**

Susan M. Franzetti Attorney, Nijman Franzetti LLP

### **Outside Contractors**

Jeremy NelsonSupervisor - Veolia Environmental ServicesPat OliverSupervisor - Veolia Environmental ServicesTim E. CaseyContractor (self) - PerSe Employment Agency

Glen Manny Supervisor – G.J. Beemsterboer Inc. Michael Chiappetti Jr Driver – Future Environmental Inc.

# 3. Provide a complete copy of engineering plans or specifications for the two ponds or impoundments identified in the attached aerial photograph.

**RESPONSE:** We have included plans and specification per your request, but they are outdated and do not reflect current conditions. Accordingly, we are providing more detailed information to accompany those documents. An Area Plan is provided in Attachment 1, Figure #1A and Figure #1B is the 1999 schematic (from our NPDES Permit application) which describes how this South Detention Basin fits into our facility.

The ponds identified in the attached aerial photograph are known as Crawford's Stormwater Basin 9, also referred to at times as "Pit 9" or "the "South Detention Basin." The plans and specification for South Detention Basin identified in the Crawford Station historical records are from the period when the present system of basins and wastewater treatment facilities were designed and constructed for Commonwealth Edison in the 1970's. Stormwater Basin drainage areas, potential runoff volumes, as well as pumping rates, basin elevations, and pump chamber configuration are summarized on two tables in Attachment 2: Table 4-1 Runoff Collection Areas and Pumps System Description and Table 4-2 Pump Pits, as excerpted from a document entitled "System Description and Instruction Manual for the Wastewater Control and Treatment Facilities" by Fluor Pioneer Inc, dated April 3, 1978 (the "System Description and Instruction Manual"). The information in Table 4-1 (Attachment 2) indicates that South Detention Basin was engineered for a capacity based on historical 10-year, 24-hour rainfall.

The historical station records also indicate that in approximately 1993, a concrete wall/weir was designed for construction across South Detention Basin and an oil water separator was to be constructed immediately upstream of the Basin 9 inlet. The enclosed Attachment 3, Drawing Number 13.43-13, shows a 12,000 gallon oil water separator was installed for the 12.5kV Switchyard (the "Peaker Yard"). As described in enclosed Attachment 4, "Peaker Yard Diagram with Description", Shift Engineers Memo dated Nov. 8, 1994, as part of a "recent peaker renovation project, the peaker yard wastewater collection system was revised to improve collection and handling of oil leaks around the peakers." The "new oil/water separator" was installed "on the southwest side of Pit #9" to retain oil in the separator while water flows out into Pit #9 (i.e., South Detention Basin). In addition, a wall was installed in Pit #9 to further prevent oil from reaching the pit pumps and being pumped to the wastewater treatment plant. review of the station's historical records did not reveal any further description or diagram of the concrete wall/weir. It is also unknown when Basin 9 was altered to have the "pre-chamber" shown in the referenced photo provided by the EPA. Based on information and belief, the former owner, Commonwealth Edison installed the pre-chamber sometime between 1993 and 1999 to provide additional oil separation for the stormwater collected in the basin. The diagram shown in Attachment 4 describes manholes and catchbasins (also known as "vaults") in the Peaker Yard as well as their flow pattern toward the oil water separator upstream of South Detention Basin.

The peakers and peaker fuel tank previously located in the Peaker Yard were permanently retired in 2006. Demolition began August 9, 2006. See enclosed Attachment 5: MWGen letter to the IEPA dated October 16, 2006.

Stormwater flows from the south to the north basin via a pipe near the bottom of the south basin. The north basin is also split into 2 parts by a weir designed to prevent floating oil from the surface of the collected stormwater being conveyed to the equalization basins for additional treatment prior to discharge. The weir has a gate valve in the middle of the wall, below the normal waterline, which allows stormwater to pass through south to north, with the weir serving to retain oil present on the stormwater surface upstream in the south basin.

At the north end of the north basin, water pumps convey South Detention Basin effluent to either of the two equalization basins, known as Basins 21-1 or 21-2, as shown on Attachment 1. The wastewater treatment system includes coagulation, flocculation and settling in the wastewater clarifiers before discharge to the Crawford permitted outfall under its NPDES Permit.

4. Provide a diagram or specifications of any piping utilized to place solid or liquid materials or wastes into the two ponds or impoundments identified in the attached aerial photograph.

**RESPONSE:** The piping associated with South Detention Basin is used for the purpose of conveying stormwater into the basin. The piping to South Detention Basin is from the following sources: stormwater runoff/drainage from the former Peaker Yard and pumping sources from the discharges from several other stormwater detention basins.

Gravity discharges to South Detention Basin in the former Peaker Yard are from several drains and vaults, as described on Attachment 4. As shown, the former Peaker Yard drains into the oil/water separator by gravity via 8" piping and then discharges into South Detention Basin through 8" piping.

The other stormwater basins that are pumped to South Detention Basin are known as Pit 5, Pit 6, Pit 7, Pit 8, Pit 12, and Pit 22. Enclosed Attachment 6 contains the Waste Water Treatment Flow Diagram CE-CR-99 WWF-0101-D. The diagram shows that these stormwater basins are pumped to South Detention Basin via piping from the above-referenced pumping stations which discharge to Basin 9 at an 18-inch pipe with motor-operated valve. The basin is intended to provide a large storage volume to allow of settling of solids and separation of any stormwater related oil. If oil sheen is present, it is absorbed into floating absorbant booms. The South Detention Basin pumps then transfer the collected stormwater to the wastewater equalization basins for further treatment prior to discharge to the Chicago Sanitary & Ship Canal pursuant to the Crawford Station's NPDES Permit.

Other diagrams are shown in Attachment 6 which detail the stormwater wastewater treatment system, pump pits, vaults and inlet to South Detention Basin

Piping specifications for the 1978 stormwater wastewater system were unavailable from design or other Commonwealth Edison records.

5. Provide and inventory or list of all solid or liquid materials or wastes placed into the two ponds or impoundments in the last year via piping, as well as any other mechanism, device or method of placement.

**RESPONSE:** In the last year, the South Detention Basin received liquid materials from stormwater runoff and the regular wash down of nearby coal conveyors. No solid or liquid materials or wastes were "placed into" South Detention Basin other than stormwater The Crawford station does not maintain an inventory or list of such stormwater runoff events. A listing of Chicago weather data from the past 12 months from Chicago O'Hare Airport is provided in Attachment 7. The daily rain and snowfall events recorded in the weather data roughly approximate when stormwater runoff may have entered South Detention Basin. Actual annual rain volume pumped from South Detention Basin is estimated, based on runoff coefficients in Attachment 2, to be approximately 15 MM gallons of stormwater.

Operations of Crawford's coal handling also includes washdown with hoses of coal conveyors on a weekly, or at times, twice a week basis. Since this includes Conveyor 4, the drainage of Conveyor 4 washdown would flow to the bottom of what is called the Conveyor 4 House (in the right of the provided picture). This washdown causes coal fines and water runoff into the northside of the north Basin 9. An estimate of the water volume is not known. Washdown of other conveyors and coal handling equipment would also cause flow to basins which flow to Basin 9.

6. Identify the origin of all solid or liquid materials or wastes placed into the two ponds or impoundments in the last year via piping, as well as any other mechanism, device or method of placement.

**RESPONSE:** The origin is addressed with the responses to Request Nos. 4 and 5 above.

7. Specify the date(s) in the past three years when any solid or liquid materials or wastes were placed in the two ponds or impoundments identified in the attached aerial photograph.

**RESPONSE:** Crawford would refer to rain events over the past 3 years to approximate when stormwater flowed into Basin 9. See Table 2 in Attachment 7 for 3-year rainfall summary as well as 36 months of individual daily data. Data in Attachment 7 was provided by Daily Rain Events at Chicago O'Hare National Climatic Data Center since Crawford does not monitor water volume to South Detention Basin or facility rain events.

The events beyond normal rainfall are summarized in Table #4 (See Attachment #9) and are described below in better detail.

As mentioned in Question 5 above, coal conveyor wash down is regularly done on a weekly or bi-weekly basis. The facility has no records of specific dates over the past 3 years, however wash down of #4 conveyor resulted in coal solids and wash down water draining to the South Detention Basin.

Crawford Station experienced a flood on July 24, 2010 due to heavy rainfall. From the US Weather Service records, 6.43 inches of rain fell at Chicago's O'Hare Airport on July 23 – 24<sup>th</sup>, 2010. This resulted in local street flooding surrounding the Crawford Station, as well as flood conditions in the adjacent Chicago Sanitary and Ship Canal. Extensive flooding at the Crawford Station occurred, including the flooding of Canal water into Crawford's turbine basement. Crawford's basement was flooded to a peak height of 7 feet, 9 inches, with an estimated volume of 2.5 million gallons. Because of the flooding, Crawford's turbine lube oils stored in the basement were displaced. This oil was skimmed directly off the top of the basement water for disposal. During removal, Future used a truck to suck up oil from the basement and water would also be drawn in at times. This water would be decanted from the bottom of Future Environmental's truck into the South side of Basin 9. These events are described in Table #4 as "Oily Water". The flow is an estimate based on recollection of Future Environmental personnel.

All remaining water in the basement was pumped out for on-site wastewater treatment into either the South Detention Basin or Pit 15 after first passing through a rented, temporary oil/water separator that was placed outside of the basement. This pumping is not normally performed, however, Crawford had received an emergency variance due to the extreme weather conditions in order to render treatment to the turbine basement water (see Attachment 12.) This pumping of the flood waters from the turbine basement through the oil/water separator to the wastewater treatment system continued until August 9, 2010. This flow was during the flood water processing and daily sampling was conducted by Crawford at the point of discharge from the wastewater treatment system, which is denoted as "Outfall C01" in the Crawford NPDES Permit. During the time that the flood waters were pumped from the Crawford turbine basement, the sampling results showed no exceedances of the applicable discharge limits. These flows are called "Stormwater" in Table #4 of Attachment #9.

Crawford utilized an oil dispersant called Accell Clean to enhance removal of the oil after the flood. Canal water was treated as well as water in Basin 9. A total of nine (9) 55-gallon drums of Accell Clean were utilized during the flood recovery operations mostly in the turbine basement or added directly to the surface of the South Detention Basin. See Attachment #8 for MSDS on Accell Clean.

8. Provide a copy of any analysis of any solid or liquid materials or wastes that have been placed in the two ponds or impoundments identified in the attached aerial photograph.

**RESPONSE:** Stormwater runoff that enters Basin 9 is not analyzed. After exiting, South Detention Basin and treatment in the wastewater treatment system, the effluent discharged is analyzed pursuant to the requirements of the NPDES Permit. During the flood water processing in September 2010, daily sampling was conducted at the treated wastewater discharge Outfall C01. Crawford met all the discharge limits for the applicable parameters. Please advise whether

you wish to have copies of any of the analytical results for the treated effluent discharge at Outfall C01and, if so, for what period of time.

Any oil contaminated water from our flood restoration period would have contained each of the following three turbine oils utilized (MSDS Sheets for each are found in Attachment #8).

9. Provide a diagram or specifications of any piping, mechanism, device or method utilized to remove any solid or liquid materials or wastes from the two ponds or impoundments identified in the attached aerial photograph.

**RESPONSE:** Water pumps convey South Detention Basin effluent to either of the two equalization basins, Basins 21-1 or 21-2, as shown on Attachment 1. See also the diagrams included in Attachment 7. Solids have been removed on two occasions from South Detention Basin by using a backhoe. MWG does not have a diagram or specifications for the type of backhoe used. After the 2010 flooding event described in Response No. 7, a vacuum truck was used to skim material from the surface of South Detention Basin. MWG does not have a diagram or specifications for the vacuum trucks. MWG does not use any piping or other mechanism, device or method to remove any solid or liquid materials or wastes from Basin 9.

10. Identify all solid or liquid materials or wastes that have been removed in the past three years from the two ponds or impoundments identified in the attached aerial photograph.

**RESPONSE:** See Table #5: Crawford 3-Year Summary of Removals from South Detention Basin in Attachment #9.

Basin solids in the south, or pre-chamber to the South Detention Basin (Pit 9) were removed via backhoe in September 2011 and disposed of at Waste Management landfill. Solids with Coal fines were removed from the north portion of the South Detention Basin in October 2010 and spread on the Crawford coal pile to recycle the removed coal.

Liquids include the stormwater runoff into South Detention Basin which was pumped out of Stormwater Basin 9 into the Crawford Station equalization basins as stormwater runoff events occurred over the past 3 years. The pumped flood water from the turbine basement to South Detention Basin in 2010 also was pumped into the equalization basins between July 24<sup>th</sup> and August 9<sup>th</sup>. Following the pumping of the flood water from the turbine basement into South Detention Basin, oily water was skimmed from the surface in October 2010. Records on Table #5 are an estimate since not all oily wastewater manifests specified removal from the South Detention Basin.

11. Identify the origin of all solid or liquid materials or wastes that have been removed in the past three years from the two ponds or impoundments in the past three years via piping, as well as by any other mechanism, device or method of placement.

**RESPONSE:** The origin of the materials removed from South Detention Basin in the past three years resulted from stormwater runoff in the drainage area around South Detention Basin, coal fines from washing the nearby coal conveyor and from the flood caused by the rain event in July 2010 which caused the Chicago Sanitary and Ship Canal surface water to flood Crawford's turbine basement. The origin of wastes removed are identified in Table #5 in Attachment 9.

12. Specify the date(s) in the past three years when any solid or liquid materials or wastes that were removed from the two ponds or impoundments identified in the attached aerial photograph.

**RESPONSE:** For the stormwater pumped from South Detention Basin to the equalization basins, this pumping occurred on a regular basis following storm events over the past three years. MWG does not record dates on which there are storm events. In Attachment 7 is a set of weather records showing storm events in the Chicago area For wastes the dates are specified in Table 5 in Attachment #9.

13. Provide a copy of any analysis of any solid or liquid materials or wastes that have been removed from the two ponds or impoundments identified in the attached aerial photograph.

**RESPONSE:** After exiting South Detention Basin and treatment in the wastewater treatment system, the effluent discharged is comingled with other liquid streams and analyzed pursuant to the requirements of the NPDES Permit. During the flood water processing in September 2010, daily sampling was conducted at the treated wastewater discharge Outfall C01. Crawford met all the discharge limits for the applicable parameters. Please advise whether you wish to have copies of any of these NPDES permit effluent analytical results for the treated effluent discharge at Outfall C01and, if so, for what period of time.

In September 2011, the solids were removed by backhoe for landfill disposal under existing Waste Management profile number 102614IL, "Bottom Ash Fines from Settling Basins." The profile analytical results were based on a July 20, 2009 sample of similar material in Stormwater Basin 1 at the Crawford Station. See Attachment 10 for analytical and profile data.

14. Identify where all solid or liquid materials or wastes removed in the past three years from the two ponds or impoundments identified in the attached aerial photograph were sent, and whether the solid or liquid materials or wastes were treated, recycled or disposed.

**RESPONSE:** The water pumped from South Detention Basin to the equalization basins is treated and then discharged at Outfall C01 to the Chicago Sanitary & Ship Canal. See Table 5 in Attachment 9 for summary of where solid or liquid materials removed from South Detention Basin were treated recycled or disposed of.

15. Provide the names and employers of all personnel who placed or removed solid or liquid materials or wastes in the two ponds or impoundments identified in the attached aerial photograph in the past three years.

**RESPONSE:** MWG can provide a list of every operator at Crawford Station, however it is unreasonable and unnecessary. MWG does not know which employees were operating in that capacity and at what time. MWG is listing below the contractors and the responsible Supervisors that have placed or removed materials to the best of our information and knowledge.

**Outside Contractors** 

Jeremy Nelson Supervisor - Veolia Environmental Services
Tim E. Casey Contractor (self) - Perse Employment Agency

Glen Manny Supervisor – G.J. Beemsterboer Inc. Michael Chiappetti Jr Driver – Future Environmental Inc.

- 16. [NOTE: There was no request numbered "16" in the USEPA's Information Request.]]
- 17. Identify the names and purpose of all the structures located on the two ponds or impoundments, or immediately adjacent to or on the perimeter of the two ponds or impoundments, including any manholes, wells, or subterranean structures.

**RESPONSE:** See Diagram in Attachment 11. See also answer to #4 above with reference to Attachment 6. See also in Attachment 11 -Table #6: Identity and Purpose of Structures

18. Provide the following certification by a responsible corporate officer:

I certify under the penalty of the law that I have examined and am familiar with the information submitted in responding to this information request for production of documents. Based on my review of all relevant documents and inquiring of those individuals immediately responsible for providing all relevant information and documents, I believe that the information submitted is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Date	Signature of Corporate Officer, Title

**RESPONSE**: Section 3007 of RCRA, 42 U.S.C. §6927 does not grant U.S. EPA the authority to require a certification of this type in an information request. MWGen respectfully declines to provide this certification. MWGen further submits that the requirement to submit the certification is unreasonable under the relevant facts and circumstances. For example, certain of the requests seek information that predates MWGen's ownership and operation of the Crawford Station and MWGen does not have sufficient knowledge on which to base belief that the information in its historical records is "true, accurate and complete" as required by the language of the certification. Therefore, MWGen objects to completing the certification.

### LIST OF ATTACHMENTS

Attachment 1: Figure 1A: Figure 4.1 F-1, Site Plan – Runoff Areas.

Figure 1B: Crawford Station Process Flow Schematic dated 09/03/1999

Attachment 2: Table 4-1 Runoff Collection Areas and Pumps System Description, as excerpted

from: System Description and Instruction Manual for the Wastewater Control

and Treatment Facilities by Fluor Pioneer Inc, dated April 3, 1978.

Table 4-2 Pump Pits

Attachment 3: Drawing Number 13.43-13, a 12,000 gallon oil water separator

Attachment 4: Peaker Yard Diagram with Description Nov 8, 1994

Attachment 5: Letter to Illinois EPA, dated October 16, 2006, permanently retiring twelve Crawford Station Combustion Turbine Peaking Units.

Attachment 6: Waste Water Treatment Flow Diagram CE-CR-99 WWF-0101-B

Yard Piping

CE-CR-99 WWF-0005-C

Pump Pits Sheet 1

CE-CR-99 WWF-6041-D

Pump Pits Sheet 2

CE-CR-99 WWF-6042-E

Miscellaneous Concrete Structures

CE-CR-99 WWF-6051-A

Plat of Survey Project No 98156

SHEET 1 of 3

Attachment 7: Table 1 Chicago Monthly Precipitation Totals Summary.

Table 2 Chicago Monthly Precipitation Totals summary and

Table 3 Crawford Basin 9 Stormwater Runoff Volume

36-months of Daily Rain Events at Chicago O'Hare National Climatic Data Center.

Attachment 8: MSDS of Accell Clean, an oil dispersant used for Crawford's flood response

MSDS of Mobil DTE 797, Mobil DTE 732, and Chevron GST 32.

Attachment 9: Table 4: Crawford 3-Year Summary of Additions to South Detention Basin.

Table 5: Crawford 3-Year Summary of Removals from South Detention Basin

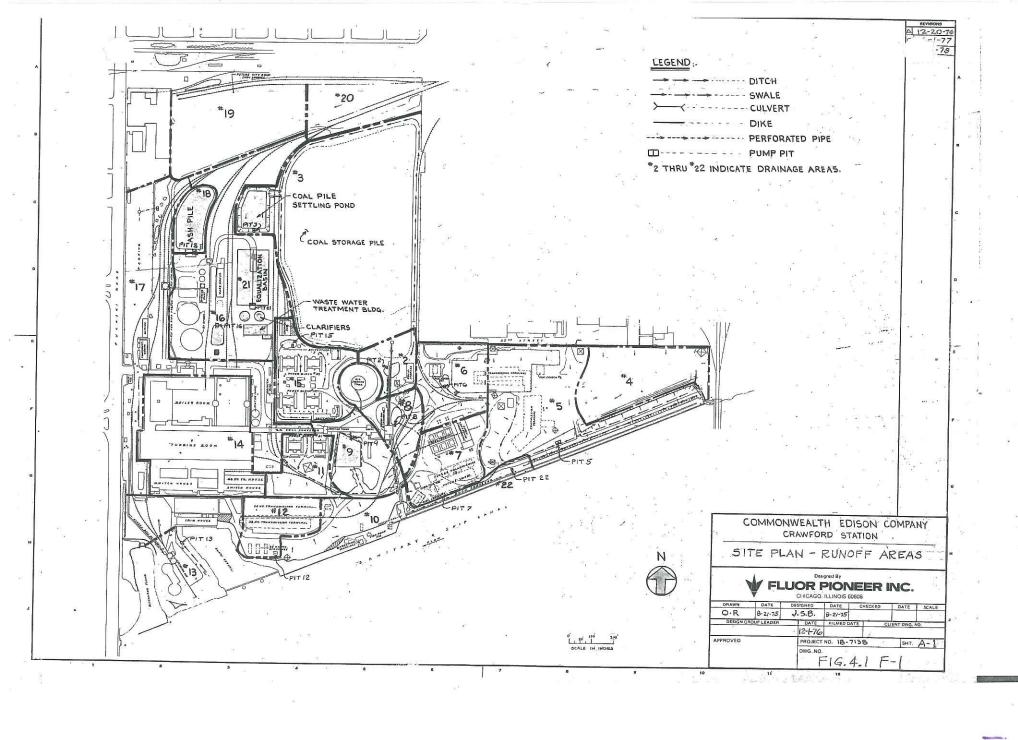
Attachment 10: Manifest Records – Basin Sludge

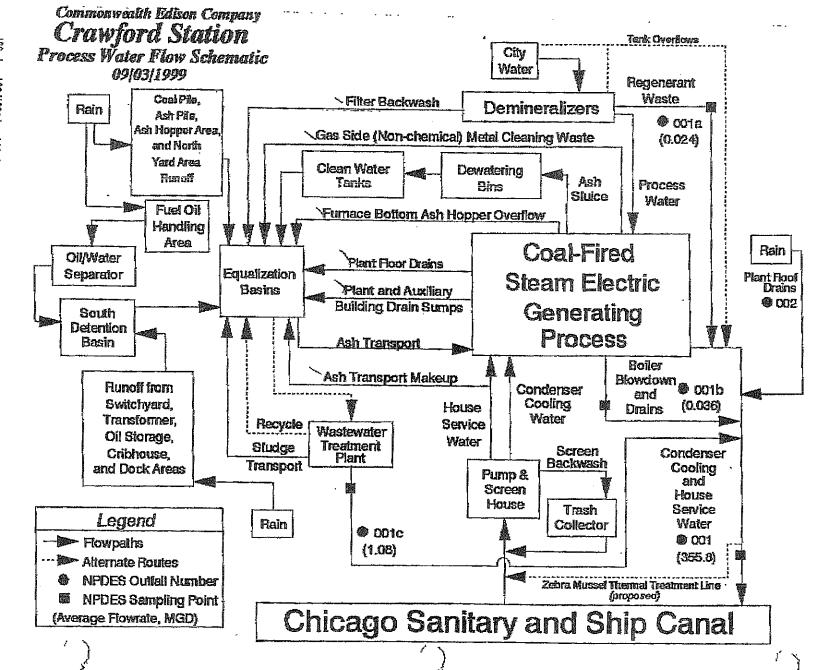
Waste Management Profile Records with analysis - Basin Sludge

Attachment 11: Diagram of Basin #9 and Adjacent Structures

Table 6: Identity and Purpose of Structures

Attachment 12: Emergency Variance from Illinois EPA (details re July Flood response)







## RUNOFF COLLECTION AREAS AND PUMPS. TABLE 4-1 VALUES FOR 10 YEAR, 24 HOUR RAINFALL

AREA		]	PUMPS-GPM	r	.88"	1.55"	2.1"	2.4"	2.64"	2.8"	2.92"	3.02"	3.10"	4.1"	
NO.	ACRES	C	STOR.103 G	TIME	10 MIN.	30 MIN.	1 HR.	2 HRS.	3 HRS.	4 HRS.	5 HRS.	6 HRS.	7 HRS.	24 HRS	
			2-200	R	1422	835	565	323	237	188	157	136	119	46	
2	2 1.0 .6	.6		Q	14	25	34	39	43	45	47	49	51	66	
		15	Р	3	11	23	39								
				V	11.	14	11	0							
_	3 14.0	.6	2-200	R	20000	12000	8400	4800	3500	2800	2300	2000	1800	644	
3		&		Q	203	362	499	584	642	681	709	729	752	996	
		.9	620	P		4	10	22	46	70	94	118	142	550	
			0.0000	V	203	358	489	558	606	611	615	611	610	446	
			2-2000	R	9100	5300	3600	2100	1500	1200	1000	870	760	294	
T-1	c 1	_	70	Q	91	161	217	249	274	290	303	314	326	425	
5	6.4	. 6	72	P	37	117	217								
		-	0.000	V	54	44	0				,				
6	2.0		2-600	R	2850	1670	1130	650	470	380	310	270	240	92	
6	2.0	. 6	20	Q	29	50	68	78	86	91	95	99	102	133	
		. 0	20	V	10	44	68								
		-	2-1000	R	19 3570	3000	0	070	500	470	000	040			
7	2.5	. 9	2-1000		36	2090	1410	810	590	470	390	. 340	300	115	
1	2.5	. 6	25	Q	17	63 57	85 85	97	107	113	118	123	127	166	
	į.	. 0	23	V	19	6	0								
			2-600	R	2850	1670	1130	650	470	380	310	270	040	- 00	
8	2.0		2 000	Q	29	50	68	78	86	91			240	92	
	2.0	.6	22	P	9	33	68	70			95	99	102	133	
				v	20	17	0								
			2-2000	R	14100	12900	10700	6100	4500	3600	3000	2600	2300	870	
9	2.1	.6	1-400	Q	141	388	644	736	811	860	897	931	959	1257	
		&	1 ,00	P	15	83	215	479	743	860		331		1237	
	İ	.9	. 462	V	126	305	429	257	68	0				1	
11	1.6	.6	Gravity	Q	23	40	54	62	68	73	76	79	81	106	
			2-500	R	2400	1420	960	550	400	320	270	230	200	78	
			31,47 03,42,40 0.0	Q	24	43	59	66	73	77	80	83	86	112	
12	1.7	.6	15	P	9	29	59			T					
	1			V	15	14	0						T	T	
			2-200	R	1422	835	565	323	237	188	157	136	119	46	
13	1.0	.6	Pumps to	Q	14	25	34	39	43	45	47	49	51	66	
			Ash Basin	P	3	Jl	23	39							
		i_	, 15	١ ٧	. 11 :	14	11	0			*	in.			
	11170 10170		2-1500	R	4120	2440	1660	940	690	550	450	390	350	1 135	
15	2.9	.9	.6 16		Q	41	73	99	113	124	132	137	141	148	193
				16	Р	26	73								
				V	15	0								**************************************	
			2-1500	R	11000	6500	4300	2500	1800	1500	1200	1050	920	355	
16	7.7	.7	1		Q	110	193	262	300	329	349	364	376	386	511
			111	P	24	84	174	300							
		<u>i                                    </u>	2	V	86	109	88	0					K .		
10			2-500	R	2100	1300	850	480	350	280	230	200	180	69	
18	1.5	-		Q	22	38	57	58	64	68	71	73	76	100	
		.6	20	P		- 27	51								
_	-	-	4 1000	\ \ \	15	11	0	0.700	7000	6700	P.76.			i	
21	0.4	1	4-1000	R	8200	9900	9900	8700	7800	6700	5700	5000	4690	-2240	
41		335 104 17	2-400	Q	85	298	593	1043	1403	1602	1711	1812	1909	: 3227	
		9	1100	V	4	12	50	176	368	657	945	1089	1233		
	half		1188		81 710	286	543	867	1035	945	766	723	676	0	
	0.5		2-200	R	-	420	280	160	120	90	80	70	60	23 .	
22	0.5	.6		Q P	7	13	17	19	21	23	24	24	25	33	
~~		. 0	7	V	3	12	17								
Plan	+ //0	0 60	PM (Ave)	0	4	12	24	48	70	0.0	120	7.00	7.00	576	
		nu ur	II INVE	I V	4	14	24	40	72	96	120	144	168	576	

NOTE: BASIN 21 HIGH WATER ALARM SOUNDS AT ± 2 HOURS, 34 MINUTES. OPERATOR IS ASSUMED TO OPEN SLUICE GATE 5 TO 2ND PIT AT 2 HOURS, 40 MINUTES, AND CLOSE GATE AT 5 HOURS OF RAINFALL EVENT. BASIN 21 IS ASSUMED TO START RAINFALL EVENT WITH 6" OF WATER OVER WEIR (64,000 GALLONS).

LEGEND: R = RUNOFF RATE IN GPM (PUMPED INFLOW FOR BASINS 9 & 21)

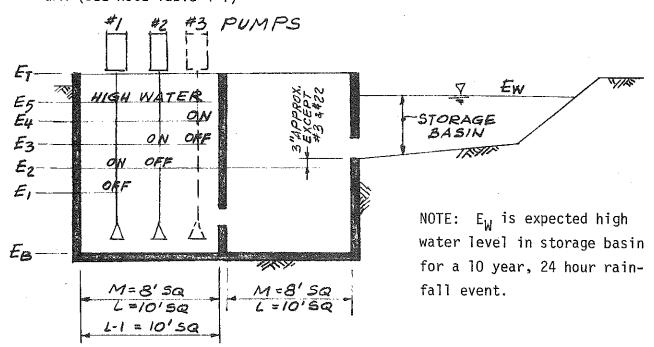
- Q = ACCUMULATIVE RUNOFF PLUS VOLUME PUMPED IN (GALLONS  $\times$   $10^3$ )
- $P = ACCUMULATIVE VOLUME PUMPED OUT (GALLONS x <math>10^3$ )
- $V = VOLUME OF WATER STORED IN PIT AND BASIN (GALLONS <math>\times 10^3$ )
- r = RAINFALL (INCHES) TOTAL IN GIVEN TIME
- --= INDICATES INTERMITTENT OPERATION OF PUMP
- C = RUNOFF COEFFICIENT

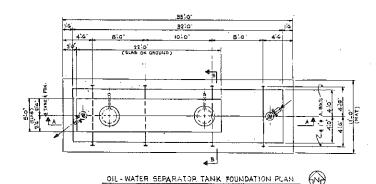
PUMP PITS TABLE 4-2

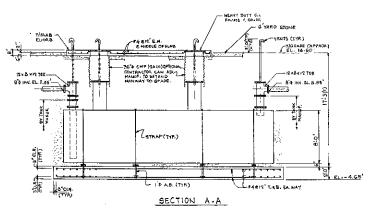
ADEA	PUMPS	DUMD	ELEVATIONS							:
AREA NO	(GPM)	PUMP PIT SIZE	E <sub>B</sub>	E	E <sub>2</sub>	E <sub>3</sub>	E <sub>4</sub>	E <sub>5</sub>	E <sub>T</sub>	EW
2	2-200	М	4'-0	7'-0	8'-6	9'-6	-	10'-6	12'-0	11'-0
3	2-200	М	0'-6	3'-6	6'-6	7'-6	_	8'-6	11'-0	8'-6
5	2-2000	L	-1'-2	1'-10	5'-4	6'-4	_	7'-6	14'-0	8'-0
6	2~600	M	4'-3	7'-3	8'-9	10'-0	_	12'-0	13'-3	11'-10
7	2-1000	L-I	-3'-0	0'-2	0'-8	1'-8		4'-6	14'-0	12'-8
8	2-600	М	6'-0	9'-0	10'-6	12'-0	-	13'-0	14'-6	13'-0
9	1-400, 2-2000 <sup>1</sup>	L	2'-0	5'-0	5'-6	7'-6	9'-6	13'-0	15'-6	13'-0
12	2-500	М	-1'-0	2'-0	3'-6	5'-0	_	12'-0	15'-8	13'-0
13	2-200	M	6'-6	9'-6	11'-6	12'-6	-	13'-6	14'-8	13'-6
15	2-1500	L	2'-0	51-0	8'-3	9'-3		10'-0	13'-0	10'-0
16	2-1500	L	-1'-3	1'-9	5'-9	7'-3	_	70'-0	11'-0	9'-0
18	2-500	M	2'-6	5'-6	7'-0	8'-6	-	9'-6	11'-0	9'-6
21	1-400, 2-1000 <sup>1 2</sup>		3'-6	6'-6	7'-0	9'-6	12'-0	14'-6	16'-0	15'-6
22	2-200	М	1'-2	4'-2	5'-2	6'-2	_	8'-6	11'-6	8'-6

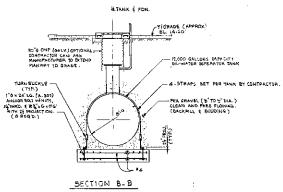
<sup>&</sup>lt;sup>1</sup> Basin 9 & 21 - Pump #1 is 400 GPM

Basin 21 - Operator can use 2 pump pits with capacity of 2-400 and 4-1000 GPM (See Note Table 4-1)











B

3

**∆** c

TO: Shift Engineers

RE: Peaker Yard

### Gentlemen:

During the recent peaker renovation project, the peaker yard wastewater collection system was revised to improve collection and handling of oil leaks around the peakers:

 Catchbasins and manholes in the new system are located as shown on the attached sketch.

We are presently in the process of labeling each catchbasin and manhole to simplify its identification in the field.

- 2. The area inside the fuel oil storage tank berm has been graded and sloped to a drain on the southwest side of the tank. The drain is connected to the new drainage system. A valve is located in the drain line from inside the berm to isolate the bermed area in the event of a catastrophic failure of the tank. THIS VALVE SHOULD NEVER BE LEFT OPEN UNATTENDED.
- 3. The new drainage system runs through a new oil/water separator on the southwest side of Pit #9. Oil is retained in the separator while water flows out into Pit #9.

A procedure for operating the new separator will be developed in the near future.

4. A wall has been installed in Pit #9 to further prevent oil from reaching the pit pumps and being pumped to the wastewater treatment plant.

Due to the new system, it is no longer necessary to contain and clean up minor oil spills around the peakers. Most spills can be flushed to any catchbasin in the new drainage system and handled by the new oil/water separator.

However, care must be taken not to overload the new separator and every effort should be made to minimize oil spills.

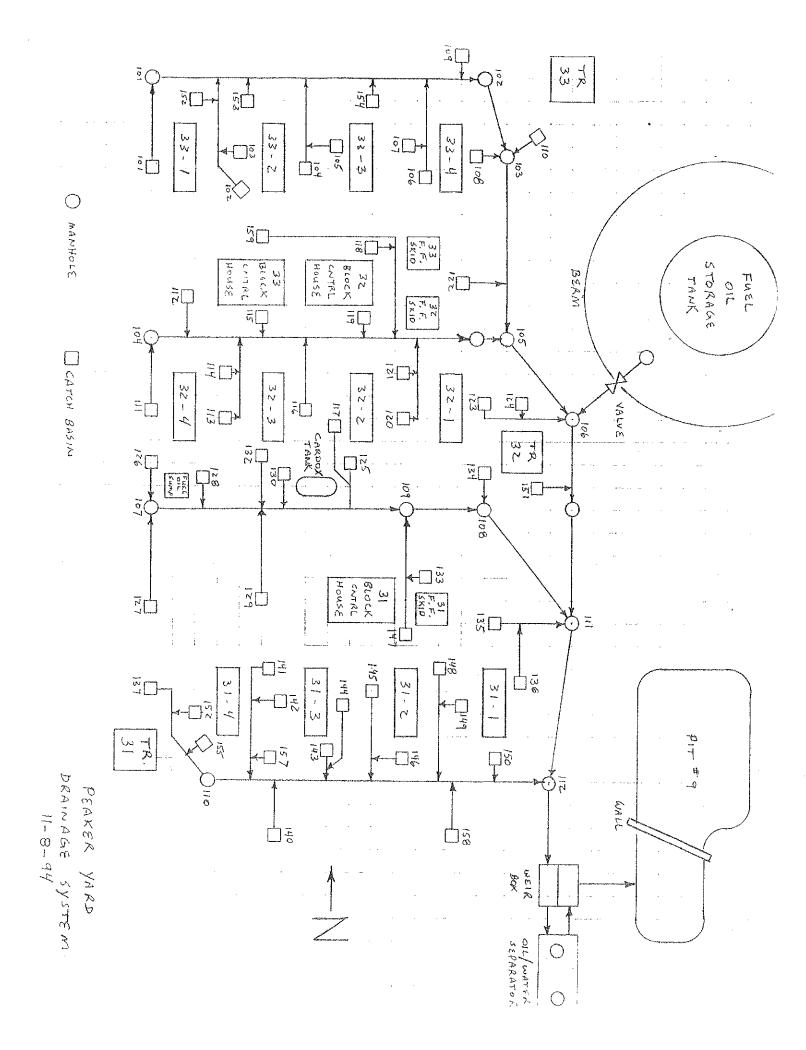
Please pass this information along to personnel in your department.

Please call me at x2289 if you have any questions.

cc: J. Makowski

F. Veenbaas

B. Pico M. Phillip M. Rowland







October 16, 2006

Mr. Donald Sutton
Manager, Permit Section
Division of Air Pollution Control
Illinois Environmental Protection Agency
1021 North Grand Avenue East
P.O. Box 19506
Springfield, Illinois 62794-9506

Federal Express

Subject:

Crawford Station Combustion Turbine Peakings Units Withdrawal of the Operating Permit for 12 Turbines

Station ID: 031600AIN Application No.: 73030807

County: Cook

Dear Mr. Sutton:

Midwest Generation hereby notifies the IEPA of the permanent retirement of the twelve Crawford Station Combustion Turbine Peaking Units.

Please withdraw the attached permit which expired November 27, 1996.

If you have any questions regarding this letter, please contact Scott B. Miller of my staff at (312) 583-6059.

Sincerely,

Basil G. Constantelos

Director, Environmental Services

cc: Julie Armitage (IEPA – Compliance Section, Springfield)

Martin Tippin (IEPA - Regional Office - Des Plaines)

Tel: 312 583 6029 Fax: 312 788 5529



217/782-2113

### OPERATING PERMIT

# PERMITTEE

Commonwealth Edison Company Attn: Thomas E. Hemminger c/o Environmental Services P.O. Box 767 Chicago, IL 60690

I.D. No.: 031600AIN Application No.: 73030807

Date Received: November 18, 1991 Applicant's Designation: CRFDPKRSGT

Subject: Crawford Gas Turbine Peakers

Expiration Date: November 27, 1996 Date Issued: December 3, 1991

Location: 3501 South Pulaski Road, Chicago

Permit is hereby granted to the above-designated Permittee to OPERATE emission source(s) and/or air pollution control equipment consisting of 12 oil and natural gas fired turbines as described in the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

- 1. At the above location, the Permittee shall not keep, store, or utilize:
  - (i) distillate fuel oil (Grades No. 1 and 2) with a sulfur content greater than the larger of the following two values:
    - (1) 0.28 weight percent, or
    - (2) the wt. percent given by the formula: Maximum wt. percent sulfur = (0.000015) x (Gross heating value of oil, BTU/lb).
- Organic liquid by-products or waste materials shall not be used in these fuel combustion emission sources without written approval from this Agency.
- The Agency shall be allowed to sample all fuels stored at the above location.

Donald E. Sutton, P.E.

Manager, Permit Section

Division of Air Pollution Control

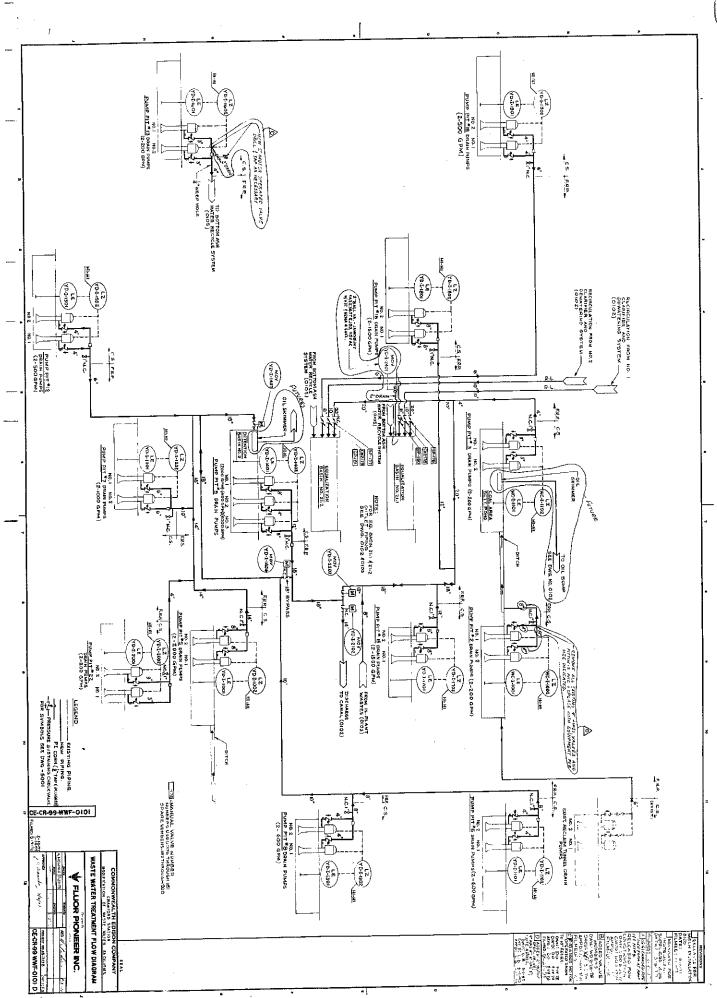
and E. Sutten Hose

DES:ELN:jmm/sp/863M/23

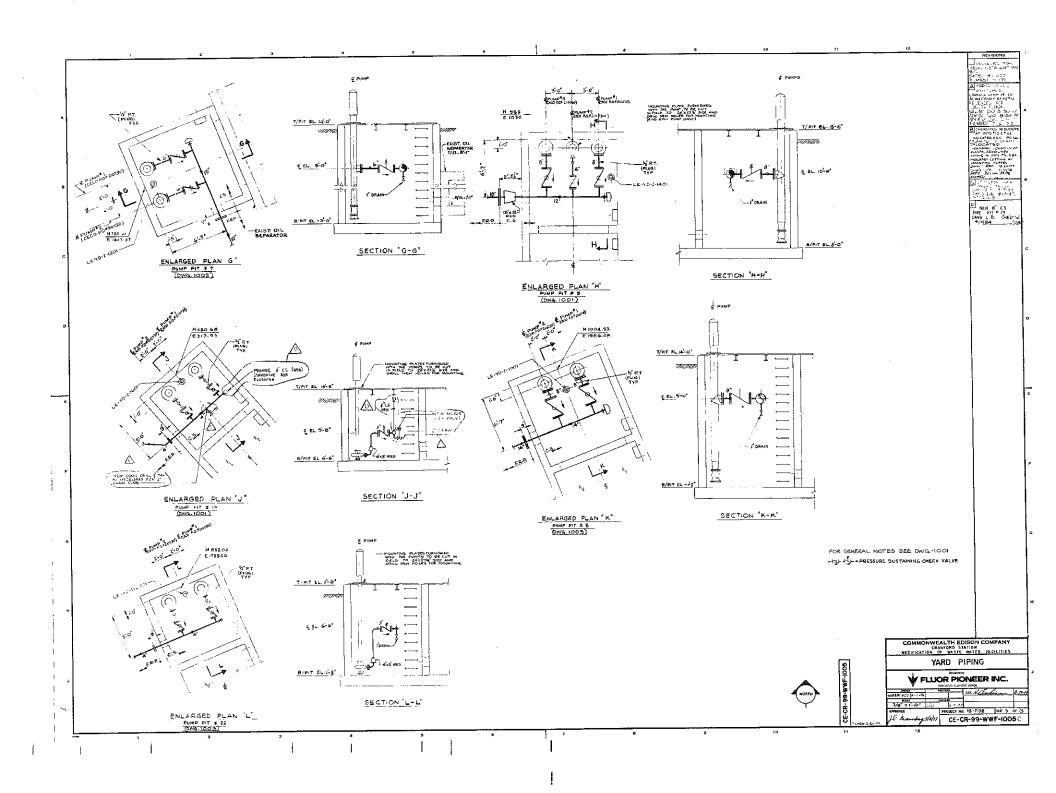
cc: Region 1

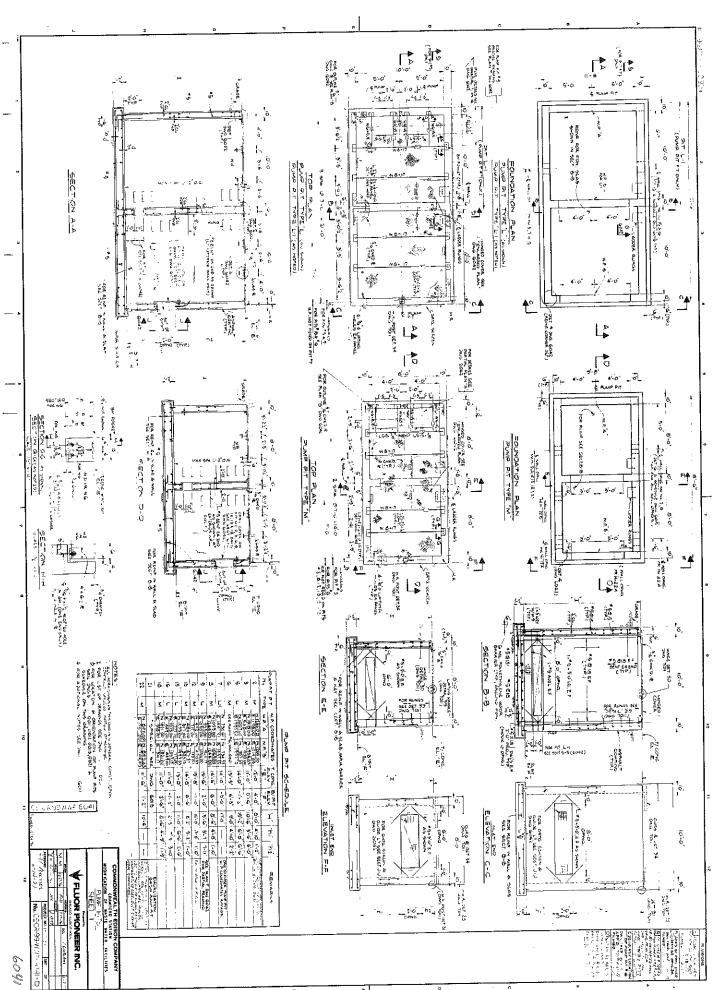
bcc:

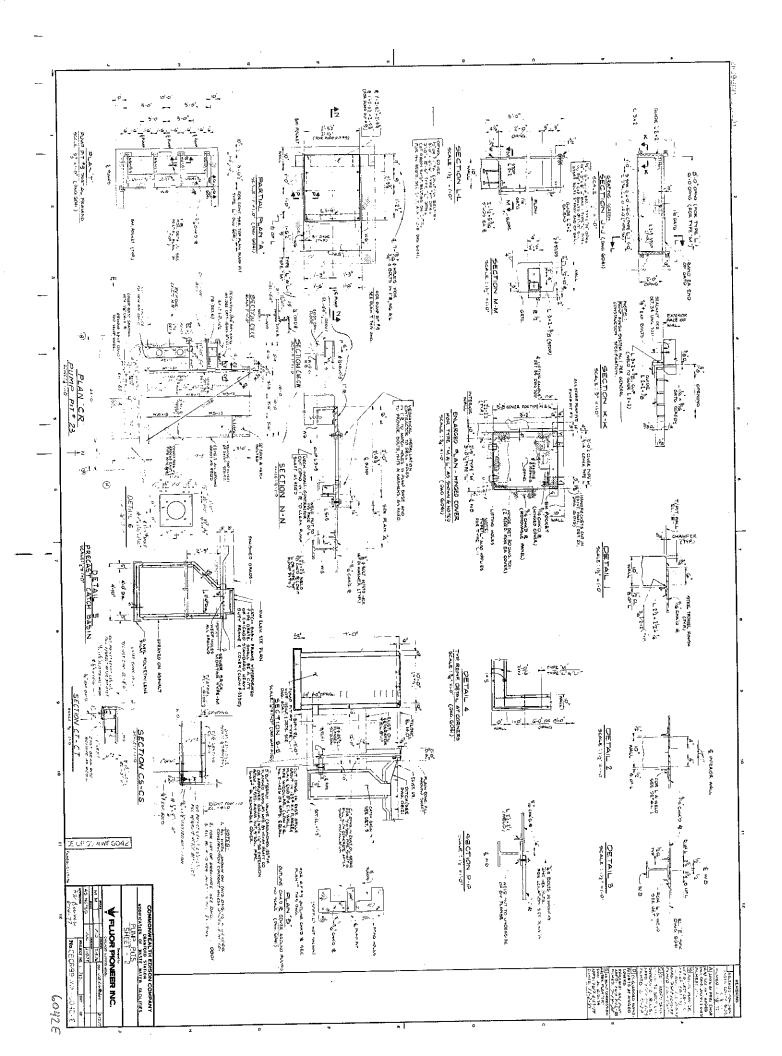
Luke Ford (Crawford) Andrea Crapisi Station File: AIR-T7 Corporate File: A-CRA-PER-B

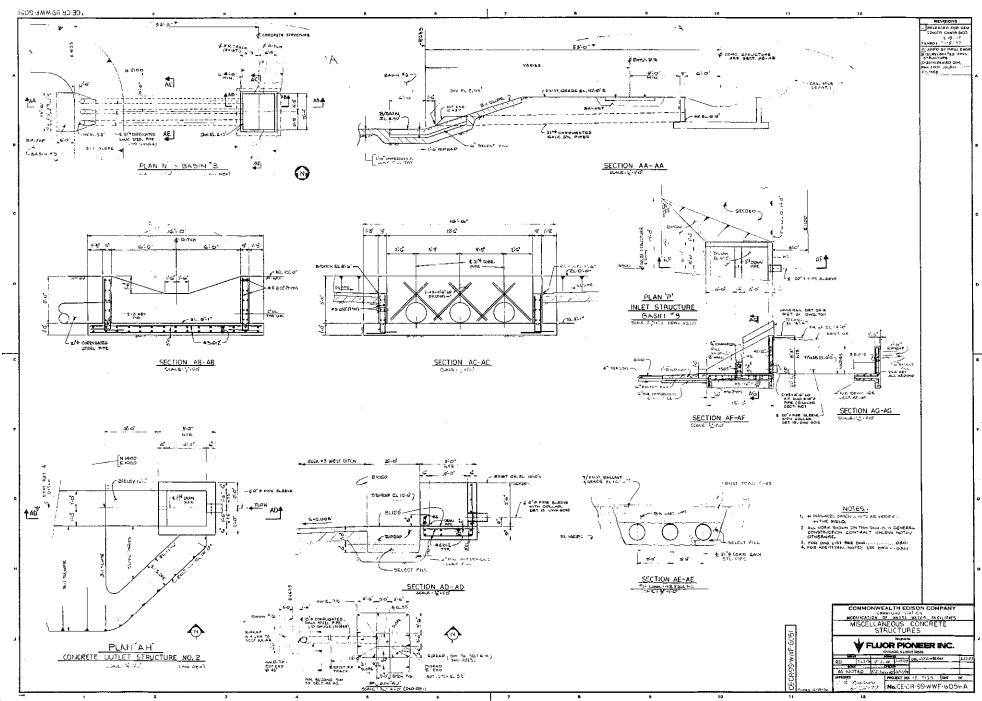


V









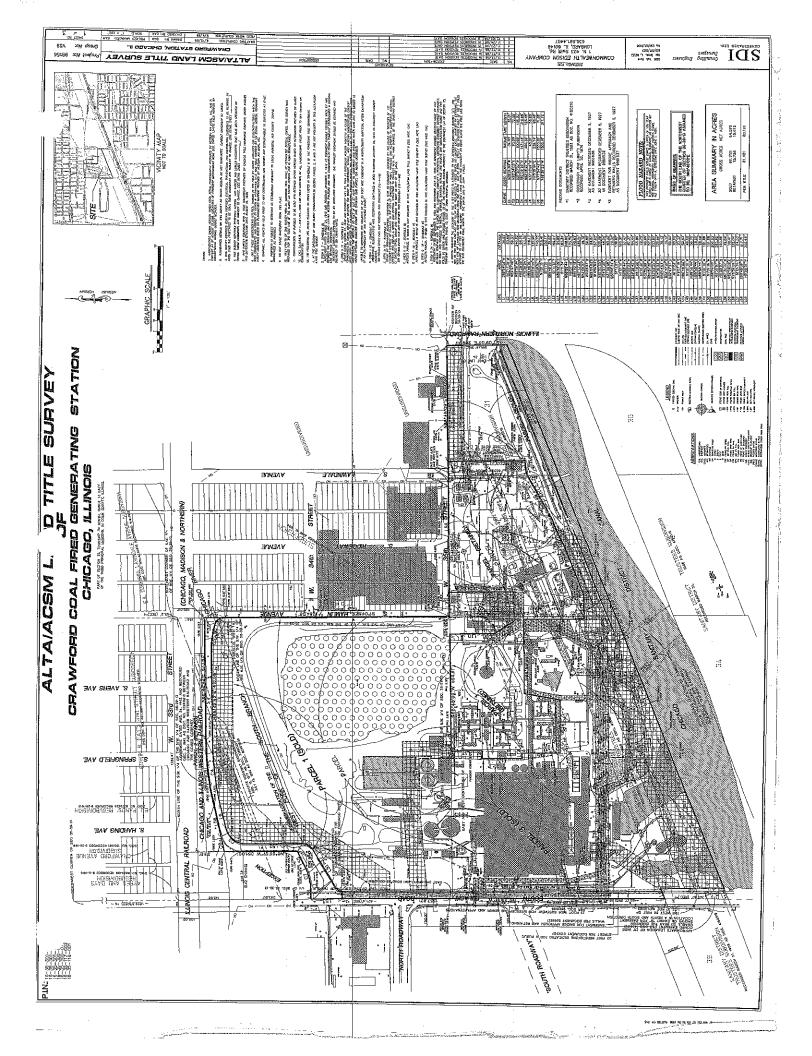


TABLE 1
CHICAGO MONTHLY PRECIPITATION TOTALS SUMMARY
ALL DATA IN INCHES

		Precipit	ation	Snow's	Total
Month	Year	Rain	Snow	Rain Eq.	Precip
Oct	2010	0.93			0.93
Nov	2010	2.51			2.51
Dec	2010	2.35	16.2	1.62	3.97
Jan	2011	0.92	11.1	1.11	2.03
Feb	2011	3.52	29.0	2.9	6.42
Mar	2011	2.62	1.0	0.1	2.72
Apr	2011	4.9	0.6	0.06	4.96
Мау	2011	7.27			7.27
Jun	2011	3.39			3.39
Jul	2011	11.15			11.15
Aug	2011	4.54			4.54
Sep	2011	3.45			3.45
			·····		
TOTALS:		47.55	57.9	5.79	53.34

TABLE 2
CRAWFORD ESTIMATED STORMWATER VOLUME BASIN 9

		Prec	ipitation	Flow CFS	Flow GPM	"Events"	Annual
BASIN#	ACRES	С	I ("Events")	per Event	per Event	per Yr	Flow, Gals
5	6.4	0.6	2.1	8.064	3,619	25.4	5,515,544
6	2.0	0.6	2.1	2.52	1,131	25.4	1,723,607
7	2.5	0.6	2.1	3.15	1,414	25.4	2,154,509
8	2.0	0.6	2.1	2.52	1,131	25.4	1,723,607
9	2.1	0.6	2.1	2.646	1,188	25.4	1,809,788
12	1.7	0.6	2.1	2.142	961	25.4	1,465,066
22	0.5	0.6	2.1	0.63	283	25.4	430,902

TOTALS: 17.2 14,823,024

Assumes all precipitation as exactly 2.1" rain events, and at 1 hour per event

TABLE 3
CHICAGO MONTHLY PRECIPITATION TOTALS SUMMARY
36-MONTH TOTALS THRU SEPT 2011

ALL DATA IN INCHES

		Precipi	tation	Snow's	Total
Month	Year	Rain	Snow	Rain Eq.	Precip
Oct	2008	2.07			2.07
Nov	2008	1.81	0.6	0.06	1.87
Dec	2008	5.77	21.9	2.19	7.96
Jan	2009	1.16	21.5	2.15	3.31
Feb	2009	3.39	4.5	0.45	3.84
Mar	2009	5.20	2.1	0.21	5.41
Apr	2009	5.19			5.19
May	2009	3.63			3.63
Jun	2009	7.18			7.18
Jul	2009	1.53			1.53
Aug	2009	4.26			4.26
Sep	2009	1.03			1.03
Oct	2009	6.04			6.04
Nov	2009	1.23			1.23
Dec	2009	2.73	20.8	2.08	4.81
Jan	2010	1.13	9.1	0.91	2.04
Feb	2010	1.64	22.5	2.25	3.89
Mar	2010	1.55	1.8	0.18	1.73
Apr	2010	3.01			3.01
May	2010	4.90			4.9
Jun	2010	6.17			6.17
Jul	2010	8.84			8.84
Aug	2010	1.80			1.8
Sep	2010	2.78			2.78
Oct	2010	0.93			0.93
Nov	2010	2.51			2.51
Dec	2010	2.35	16.2	1.62	3.97
Jan	2011	0.92	11.1	1.11	2.03
Feb	2011	3.52	29.0	2.9	6.42
Mar	2011	2.62	1.0	0.1	2.72
Apr	2011	4.9	0.6	0.06	4.96
May	2011	7.27			7.27
Jun	2011	3.39			3.39
Jul	2011	11.15			11.15
Aug	2011	4.54			4.54
Sep	2011	3.45			3.45
3	-YEAR TOTALS:	131.59	162.7	16.27	147.86

3-YEAR TOTALS: 131.59 162.7 16.27 147.86 AVG ANNUAL TOTALS: 43.86 54.23 5.42 49.29

Untitled
Explanation of the Preliminary Monthly Climate Data (F6) Product
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WFO Monthly/Daily Climate Data

CXUS55 KLOT 010700 CF6ORD

PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6)

STATION: CHICAGO-OHARE IL

MONTH: OCTOBER YEAR: 2010 LATITUDE: 41 58 N LONGITUDE: 87 54 W

	TEMPERATURE IN F: 1 2 3 4 5 6A						PCPN:	5	SNOW:	MIW			: SUNS	SHINE	: SK	Y	:PK	WND
1	2	3	4	5	6A	6в	7	8	9 12z	10 4VG	11	====: 12 2MIN	13	14	15	16	5 17	18
DY ===	MAX	MIN	AVG	DEP	HDD	CDD	WTR	SNW	DPTH				MIN	PSBL	S-S	WX	SP	D DR
123456789101121314415617892012223456278290331	737 560 560 779 882 766 663 765 665 770 645 652 770 645 652 770 645 652	485 485 498 498 498 498 498 498 498 498 498 498	6119494949494949494949494949494949494949	37-88-367-9616404214411-731146464672	4 14 16 16 11 3 2 1 0 0 0 1 8 10 1 9 9 13 5 8 8 16 5 2 1 3 1 2 2 4 2 1 2 1 2 8 6	000000663000000000000000000000000000000	0.08 0.26 0.08 0.00 0.00 0.00 0.00 0.00 0.00 0.0	0.000.000000000000000000000000000000000	000000000000000000000000000000000000000	15.2 11.3 3.5 7.2 12.1 10.6 11.2 12.2 14.0 12.2 14.0 12.2 14.0 12.2 14.0 15.0 16.0 16.0 16.0 16.0 16.0 16.0 16.0 16	3 22 10 10 10 10 10 10 10 10 10 10 10 10 10	250 250 200 220 40 60 340 360 200 340 210 210 210 280 280 210	M M M M M M M M M M M M M M M M M M M	M M M M M M M M M M M M M M M M M M M	48640101156666531475442087830655 145	1 1 1 1 1 3 1 8	2332121212 22222332223332355323232	5 10 10 30 10 60 10 70 10 240 10 240 10 20 10 40 10 20 10 40 10 20 10 40 10 20 10 20 1
==: AV		====	====	====			U.33	====				==== STST	====		145 ==== 5	===:		====
==	-====						=====:	MIS	C				M 	M =====	_	#	MAX(M 55 2	60 =====

#### NOTES:

DPTR FM NORMAL

TOTAL FM JAN 1 DPTR FM NORMAL

[REMARKS] #FINAL-10-10#

# LAST OF SEVERAL OCCURRENCES

COLUMN 17 PEAK WIND IN M.P.H.

PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6), PAGE 2

STATION: CHICAGO-OHARE IL

MONTH: OCTOBER
YEAR: 2010
LATITUDE: 41 58 N

LONGITUDE: 87 54 W

#### [TEMPERATURE DATA] [PRECIPITATION DATA] SYMBOLS USED IN COLUMN 16 AVERAGE MONTHLY: 56.0 TOTAL FOR MONTH: 0.93 1 = FOG OR MISTMAL: 3.9 86 ON 9 DPTR FM NORMAL: DPTR FM NORMAL: -1.782 = FOG REDUCING VISIBILITY GRTST 24HR 0.26 ON 2-2 TO 1/4 MILE OR LESS HIGHEST: LOWEST: 31 ON 29 3 = THUNDER4 = ICE PELLETS SNOW, ICE PELLETS, HAIL TOTAL MONTH: 0.0 INCH 5 = HAILGRTST 24HR 0.0 6 = FREEZING RAIN OR DRIZZLE GRTST DEPTH: O 7 = DUSTSTORM OR SANDSTORM: VSBY 1/2 MILE OR LESS 8 = SMOKE OR HAZE[NO. OF DAYS WITH] [WEATHER - DAYS WITH] 9 = BLOWING SNOWX = TORNADOMAX 32 OR BELOW: 0 0.01 INCH OR MORE: 8 MAX 90 OR ABOVE: 0 0.10 INCH OR MORE: 4 0 MIN 32 OR BELOW: 1 0.50 INCH OR MORE: MIN O OR BELOW: 0 1.00 INCH OR MORE: 0 [HDD (BASE 65) ] TOTAL THIS MO. CLEAR (SCALE 0-3) PTCLDY (SCALE 4-7) 286 DPTR FM NORMAL -115 19 TOTAL FM JUL 1 356 CLOUDY (SCALE 8-10) DPTR FM NORMAL -172 [CDD (BASE 65) ] 15 TOTAL THIS MO.

[PRESSURE DATA]

HIGHEST SLP M ON M LOWEST SLP 28.93 ON 26

5 1181

351

# Chicago Weather Data.2010.Nov.txt

Explanation of the Preliminary Monthly Climate Data (F6) Product These data are preliminary and have not undergone final quality control by the National Climatic Data Center (NCDC). Therefore, these data are subject to revision. Final and certified climate data can be accessed at the NCDC - http://www.ncdc.noaa.gov.

WFO Monthly/Daily Climate Data

000 CXUS55 KLOT 010700 CF6ORD PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6)

STATION: CHICAGO-OHARE IL MONTH: NOVEMBER

YEAR: 2010 LATITUDE: 41 58 N LONGITUDE: 87 54 W

TEMPERATURE IN F:	:PCPN: SNOW:	WIND :SUNSHINE: SKY	:PK WND
1 2 3 4 5 6A	6в 7 8 9 12 <i>7</i>	10 11 12 13 14 15 16  AVG MX 2MIN	17 18
DY MAX MIN AVG DEP HDD		SPD SPD DIR MIN PSBL S-S WX	SPD DR
1 54 32 43 -2 22 2 52 32 42 -3 23 3 54 31 43 -2 22 4 51 38 45 1 20 5 40 28 34 -10 31 6 46 25 36 -7 29 7 59 35 47 4 18 8 67 38 53 11 12 9 69 40 55 13 10 10 68 43 56 14 9 11 67 46 57 16 8 12 56 48 52 11 13 13 57 39 48 8 17 14 48 37 43 3 22 15 51 32 42 2 23 16 50 32 41 2 24 17 47 37 42 3 23 16 50 32 41 2 24 17 47 37 42 3 23 18 39 26 33 -5 32 19 51 25 38 0 27 20 43 30 37 0 28 21 60 41 51 14 14 22 67 39 53 16 12 23 39 26 33 -3 32 24 40 25 33 -3 32 24 40 25 33 -3 32 25 39 21 30 -5 35 26 32 18 25 -10 40 27 34 21 28 -6 37 28 46 22 34 0 31 29 49 33 41 7 24 30 49 25 37 4 28	0 0.00 0.0 0 0 0.00 0.0 0 0 0.01 0.0 0 0 0.01 0.0 0 0 0.00 0.0 0 0 0.00 0.0 0 0 0.00 0.0	5.3 14 80 M M 3 4.4 13 120 M M 1 1 8.1 15 220 M M 6 14.8 22 40 M M 6 12.0 24 330 M M 4 6.6 16 210 M M 4 8.7 17 210 M M 4 6.7 14 180 M M 3 6.1 13 100 M M 1 8.1 16 170 M M 4 6.6 14 330 M M 7 1 9.2 15 40 M M 8 15.4 25 230 M M 10 18 13.2 24 230 M M 9 1 7.5 20 200 M M 5 1 7.5 20 200 M M 5 1 7.5 20 200 M M 7 18 7.9 15 340 M M 9 18 6.6 13 300 M M 7 18 7.9 15 340 M M 9 18 6.6 13 300 M M 7 18 7.9 15 340 M M 9 18 13.6 26 200 M M 10 18 14.5 26 170 M M 10 18 14.5 26 170 M M 10 18 14.5 26 170 M M 10 138 10.6 24 290 M M 10 18 14.5 26 170 M M 10 138 10.6 24 290 M M 10 18 14.5 26 170 M M 10 138 10.6 24 290 M M 10 18 15.0 24 260 M M 9 14 9.9 22 290 M M 8 1 15.0 24 260 M M 9 14 9.9 17 170 M M 6 12.7 25 130 M M 9 1 15.4 25 250 M M 10 1	22 80 17 70 18 230 28 340 29 350 21 210 21 220 17 170 18 80 21 190 18 70 28 30 37 240 31 280 25 200 21 50 18 330 17 330 37 240 31 280 25 200 21 50 18 330 17 330 37 240 31 280 22 200 21 50 18 330 17 330 37 240 31 280 29 270 31 260 24 280 22 180 30 140 33 240 33 240
	0 2.51 T	296.8 M 182 ====================================	
AV 50.8 32.2	MISC		

### Chicago Weather Data.2010.Nov.txt

NOTES:

# LAST OF SEVERAL OCCURRENCES

COLUMN 17 PEAK WIND IN M.P.H.

PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6), PAGE 2

STATION: CHICAGO-OHARE IL

MONTH: NOVEMBER 2010 YEAR: LATITUDE: 41 58 N LONGITUDE: 87 54 W

[TEMPERATURE DATA] [PRECIPITATION DATA] SYMBOLS USED IN COLUMN 16

2.51

-0.50

AVERAGE MONTHLY: 41.5 TOTAL FOR MONTH: DPTR FM NORMAL: 2.2 HIGHEST: 69 ON 9 DPTR FM NORMAL: GRTST 24HR 1.37 ON 22-22 LOWEST: 18 ON 26

SNOW, ICE PELLETS, HAIL TOTAL MONTH: Т T ON 30-30 GRTST 24HR GRTST DEPTH: 0

[WEATHER - DAYS WITH] [NO. OF DAYS WITH]

MAX 32 OR BELOW: 1 0.01 INCH OR MORE: 10 MAX 90 OR ABOVE: 0 0.10 INCH OR MORE: MIN 32 OR BELOW: 17 0.50 INCH OR MORE: 0 1.00 INCH OR MORE: 1 MIN 0 OR BELOW:

[HDD (BASE 65) ] CLEAR (SCALE 0-3) PTCLDY (SCALE 4-7) 698 TOTAL THIS MO. DPTR FM NORMAL 15 -61 1054 CLOUDY (SCALE 8-10) 10 TOTAL FM JUL 1 DPTR FM NORMAL -233

[CDD (BASE 65) ] 0 TOTAL THIS MO. DPTR FM NORMAL 0 1181 TOTAL FM JAN 1 DPTR FM NORMAL 351

[PRESSURE DATA] HIGHEST SLP M ON M LOWEST SLP 29.54 ON 30

[REMARKS] #FINAL-11-10#

1 = FOG OR MIST2 = FOG REDUCING VISIBILITY TO 1/4 MILE OR LESS

3 = THUNDER4 = ICE PELLETS

5 = HAIL

6 = FREEZING RAIN OR DRIZZLE 7 = DUSTSTORM OR SANDSTORM: VSBY 1/2 MILE OR LESS

8 = SMOKE OR HAZE9 = BLOWING SNOWX = TORNADO

Chicago Weather Data.2010.Dec.txt
Explanation of the Preliminary Monthly Climate Data (F6) Product
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Final and certified climate data can be accessed at the NCDC http://www.ncdc.noaa.gov.

WFO Monthly/Daily Climate Data

CXUS55 KLOT 010700 CF6ORD

PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6)

STATION: CHICAGO-OHARE IL

MONTH: **DECEMBER** YEAR: 2010 41 58 N 87 54 W LATITUDE: LONGITUDE:

-	TEMPERATURE IN F: 2 3 4 5 6A			•	:	PCPN:		SNOW:	WIN	ND		:SUNS	HINE	: SK	Y ====:	: PK	WND	
1	2	3	4	5	6A	6в	7	8	9 12Z	10 4VG	11 MX	12 2MIN	13	14	15	16	17	18
DY ===	MAX	MIN	AVG	DEP	HDD	CDD	WTR	SNW	DPTH				MIN	PSBL	S-\$	WX	SPD	DR
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 22 23 24 25 26 27 28 29 30 31 20 31 21 21 21 21 21 21 21 21 21 21 21 21 21	26 331 326 20 225 336 16 227 227 335 227 366 53 463		16 17 30 30 22 14 14 24 18 15 17 29 27 24 326 27 20 23 40					0.1 0.0 5.1 TTO 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.		9.0 7.2 12.6 10.2 10.2 10.2 10.2 10.2 10.3 10.3 10.3 10.3 10.3 10.3 10.3 10.3	15 17 17 17 17 17 17 17 17 17 17 17 17 17	310 340 310 310 330 190 210 130 340 320 140 250 280 280 290 350 290 360 210 290 290 210 290 290 290 290 290 290 290 290 290 29		M M M M M M M M M M M M M M M M M M M	5 10 10 5 10 10 2 3 6 8 8 7 10 9 4 6 6 10 10	1 18 18 18 18 1 1 18 1 18 1 1 1 1 1 1 1 1 1 1 1 1 1	30 21 20 23 24 23 21 17 28 21 26 47 37 20 16 21 23 21 23 21 23 21 23 21 23 21 23 21 23 21 23 21 23 24 25 26 27 27 28 27 28 29 29 20 20 20 20 20 20 20 20 20 20 20 20 20	290 50 10 320 330 340 190 210 110 320 30 80 250 280 270 90 280 30 30 30 30 250 280 270 90 230 300 300 300 300 300 300 30
SM ==:	899 	====			1308	0	2.35		16.2		====	====:	M =====		212			====
AV ==:	29.0	16	.0 =====	====	====:	====	·	MIS	C			STST 360	M 	M 		#	MAX(MP 47 1	H) 0 ====

# Chicago Weather Data.2010.Dec.txt

NOTES:

[REMARKS] #FINAL-12-10#

# LAST OF SEVERAL OCCURRENCES

COLUMN 17 PEAK WIND IN M.P.H.

PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6) , PAGE 2

STATION: CHICAGO-OHARE IL

MONTH: DECEMBER YEAR: 2010 LATITUDE: 41 58 N LONGITUDE: 87 54 W

	LONGITUE	7E. 07 34 W
[TEMPERATURE DATA]	[PRECIPITATION DATA]	SYMBOLS USED IN COLUMN 16
AVERAGE MONTHLY: 22.5 DPTR FM NORMAL: -4.9 HIGHEST: 53 ON 31 LOWEST: 2 ON 15	TOTAL FOR MONTH: 2.35 DPTR FM NORMAL: -0.08 GRTST 24HR 0.68 ON 30-31  SNOW, ICE PELLETS, HAIL TOTAL MONTH: 16.2 INCHES GRTST 24HR 5.1 ON M GRTST DEPTH: 7 ON 26	2 = FOG REDUCING VISIBILITY TO 1/4 MILE OR LESS 3 = THUNDER 4 = ICE PELLETS 5 = HAIL 6 = FREEZING RAIN OR DRIZZLE
[NO. OF DAYS WITH]	[WEATHER - DAYS WITH]	9 = BLOWING SNOW X = TORNADO
MAX 32 OR BELOW: 23 MAX 90 OR ABOVE: 0 MIN 32 OR BELOW: 29 MIN 0 OR BELOW: 0		
[HDD (BASE 65)] TOTAL THIS MO. 1308 DPTR FM NORMAL 157 TOTAL FM JUL 1 2362 DPTR FM NORMAL -76	CLEAR (SCALE 0-3) 4 PTCLDY (SCALE 4-7) 14 CLOUDY (SCALE 8-10) 13	
[CDD (BASE 65)] TOTAL THIS MO. 0 DPTR FM NORMAL 0 TOTAL FM JAN 1 1181 DPTR FM NORMAL 351	[PRESSURE DATA] HIGHEST SLP M ON M LOWEST SLP 28.87 ON 30	

Untitled
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WFO Monthly/Daily Climate Data

CXUS55 KLOT 010700 CF60RD

PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6)

STATION: CHICAGO-OHARE IL

MONTH: **JANUARY** YEAR: 2011 LATITUDE: 41 58 N LONGITUDE: 87 54 W

T	TEMPERATURE IN F: ====================================			•		PCPN:		SNOW:	MIW	ND		: SUNS	SHINE	: SK	Y	:1	PK V	ND	
1	2	3	4	5	6A	6в	7	8	9 12z	10 AVG	11 MX	12 2MIN	<b>1</b> 3	14	15	16	)	17	18
DY ===	MAX ====	MIN	AVG	DEP	HDD	CDD	WTR	SNW	DPTH				MIN	PSBL	S-S	WX	; ====	SPD	DR
123456789011234567890112345678901 = SM	41 330 331 2224 3327 244 222 3323 330 222 3330 2333 264 272 272 272 272 272 272 272 272 272 27		28 18 29 20 23 17 20 26 25 20 20 19 12 21 25 23 21 25 30 28 23 21 21 21 21 21 21 21 21 21 21 21 21 21		37 47 436 448 448 448 449 448 449 449 449 440 440 440 440 440 440 440	000000000000000000000000000000000000000	T 0.00 0.00 0.00 T T 0.00 0.00 T T 0.01 T T 0.01 T T 0.01 0.01	0.00 TT6T009TT1TT93TT07735026TTTT0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 2 2 2 2 2	8.5 10.6 6.6 11.4 11.0 14.0 3.5 10.7 12.5 6.6 12.5 11.0 8.6 10.7	20 10 10 10 10 10 10 10 10 10 10 10 10 10	230 220 280 290 340 320 270 110 330 200 230 340 340 340 340 350 250 250 250 250 250 250 250 250 250 2	M M M M M M M M M M M M M M M M M M M	M M M M M M M M M M M M M M M M M M M	7 2 6 3 7 7 10 3 4 9 10 9 9 10 8 8 10 10 10 10 10 10 10 10 10 10 10 10 10	18 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	58	405205220224225222222222222222222222222	260 230 230 280 280 320 320 340 200 240 360 370 360 370 360 370 360 370 370 370 370 370 370 370 370 370 37
	26.7	' 14.		====	====	=====	=====			9.5	5 FA	==== STST 260	==== M	===== M			MAX 40		1)
===		====			====	=====			_		 ====						====	-===	, ====

#### NOTES:

# LAST OF SEVERAL OCCURRENCES

COLUMN 17 PEAK WIND IN M.P.H.

PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6), PAGE 2

STATION: CHICAGO-OHARE IL

MONTH: JANUARY YEAR: 2011

LATITUDE: 41 58 N

LONGITUDE: 87 54 W

# [TEMPERATURE DATA]

### [PRECIPITATION DATA]

#### SYMBOLS USED IN COLUMN 16

AVERAGE	MONTHLY:	20.6
DPTR FM	NORMAL:	-1.4
HIGHEST:	: 41 01	1 1
LOWEST:	-4 ON	۱ 21

TOTAL FOR MONTH: 0.92 DPTR FM NORMAL: -0.83 GRTST 24HR 0.68 ON 31- 1

SNOW, ICE PELLETS, HAIL TOTAL MONTH: 11.1 INCHES GRTST 24HR 5.9 ON M GRTST DEPTH: 3 ON 13

1 = FOG OR MIST 2 = FOG REDUCING VISIBILITY TO 1/4 MILE OR LESS

3 = THUNDER 4 = ICE PELLETS

5 = HAIL

9 ON M 6 = FREEZING RAIN OR DRIZZLE 3 ON 13 7 = DUSTSTORM OR SANDSTORM: VSBY 1/2 MILE OR LESS

8 = SMOKE OR HAZE
9 = BLOWING SNOW
X = TORNADO

# [NO. OF DAYS WITH] [WEATHER - DAYS WITH]

MAX 32 OR BELOW: 27 0.01 INCH OR MORE: 10 MAX 90 OR ABOVE: 0 0.10 INCH OR MORE: 3 MIN 32 OR BELOW: 31 0.50 INCH OR MORE: 0 MIN O OR BELOW: 1 1.00 INCH OR MORE: 0

[HDD (BASE 65)]
TOTAL THIS MO. 1371 CLEAR (SCALE 0-3) 3
DPTR FM NORMAL 38 PTCLDY (SCALE 4-7) 8
TOTAL FM JUL 1 3733 CLOUDY (SCALE 8-10) 20
DPTR FM NORMAL -38

[CDD (BASE 65)]
TOTAL THIS MO. 0

DPTR FM NORMAL 0 [PRESSURE DATA]
TOTAL FM JAN 1 0 HIGHEST SLP M ON M
DPTR FM NORMAL 0 LOWEST SLP 29.45 ON 7

[REMARKS] #FINAL-01-11#

Untitled
Explanation of the Preliminary Monthly Climate Data (F6) Product
These data are preliminary and have not undergone final quality control by the
National Climatic Data Center (NCDC). Therefore, these data are subject to revision.
Final and certified climate data can be accessed at the NCDC http://www.ncdc.noaa.gov.

WFO Monthly/Daily Climate Data

CXUS55 KLOT 011827 CF60RD

PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6)

STATION: CHICAGO-OHARE IL

**FEBRUARY** MONTH: 2011 41 58 N 87 54 W YEAR: LATITUDE: LONGITUDE:

TEM	TEMPERATURE IN F: 				:	PCPN:	: !	SNOW:	MIN	ID		SUNS	SHINE	: SKY	<b>′</b>	:PK \	WND
1 2	3	4	5	6A	6в	7	8	9 12z	10 AVG	11 MX	 12 2мты	13	14	15	16	17	18
DY MAX	K MIN	AVG	DEP	HDD	CDD	WTR	SNW	DPTH				MIN	PSBL	S-S	WX	SPD	DR
=====	5 -6 -6 -6 -6 -6 -6 -6 -6 -6 -6 -6 -6 -6	22 14 15 15 16 226 11 15 48 13 33 43 22 23 33 31 31 49	-20 -22 -8 5 13 7 4 16 24 14 2 3 0 -4 -1 4 3 -2 0 0	431 500 500 497 394 601 344 223 333 340 334 344 344 344 344 344 344	000000000000000000000000000000000000000	0.74 0.74 0.00 0.00 0.00 0.20 0.13 T 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0	6.6 0.0 0.0 0.0 2.6 3.2 0.1 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	3 15 18 17 17 17 19 21 19 18 18 17 16 14 10 0 0 0 0 0 0 0	9.1	39 20 23 15 14 14 12 12 25 15 17 28 17 18 18 18 18 18 18 18 18 18 18 18 18 18	40 30 230 220 240 340 350 260 210 220 230 240 340 200 190 130 300 130 360 10	M M M M M M M M M M M M M M M M M M M	M M M M M M M M M M M M M M M M M M M	8 1 1 5 10 9 5 7 2 9 6 5 5 7 10 10 10 10 10 10 10 10 10 10 10 10 10	1389 29 12 1 1 8 18 18 1456 1 1 18 16 13468 16	20 21 26 14 28 23 24 36 37 26 23 25 29 20 22 32 32	210 230 360 50 350 270 210 220 240 270 200 190 270 60 60 60 130 50 30 40
AV 32	.7 19	. 6 						C		FA:	STST 40	M	М	7	MA # 6:	AX(MPI	

NOTES:

<sup>#</sup> LAST OF SEVERAL OCCURRENCES

# COLUMN 17 PEAK WIND IN M.P.H.

PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6) , PAGE 2

STATION: CHICAGO-OHARE IL MONTH: FEBRUARY

YEAR: 2011 LATITUDE: 41 58 N LONGITUDE: 87 54 W

[TEMPERATURE DATA]	[PRECIPITATION DATA]	SYMBOLS USED IN COLUMN 16
AVERAGE MONTHLY: 26.2 DPTR FM NORMAL: -0.8 HIGHEST: 56 ON 17 LOWEST: -9 ON 10	SNOW, ICE PELLETS, HAIL TOTAL MONTH: 29.0 INCHES GRTST 24HR 13.6 ON M	2 = FOG REDUCING VISIBILITY TO 1/4 MILE OR LESS 3 = THUNDER 4 = ICE PELLETS
[NO. OF DAYS WITH]	[WEATHER - DAYS WITH]	
MAX 32 OR BELOW: 12 MAX 90 OR ABOVE: 0 MIN 32 OR BELOW: 25 MIN 0 OR BELOW: 3	0.10 INCH OR MORE: 10 0.50 INCH OR MORE: 3	X - TORNADO
DPTR FM NORMAL 6	CLEAR (SCALE 0-3) 3 PTCLDY (SCALE 4-7) 11 CLOUDY (SCALE 8-10) 14	
[CDD (BASE 65)] TOTAL THIS MO. 0	[DDECCUDE DATA]	

[PRESSURE DATA]

HIGHEST SLP 30.53 ON 3 LOWEST SLP 29.51 ON 13

[REMARKS] #FINAL-02-11#

DPTR FM NORMAL

TOTAL FM JAN 1

DPTR FM NORMAL

0

0

0

Untitled
Explanation of the Preliminary Monthly Climate Data (F6) Product
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National Climatic Data Center (NCDC). Therefore, these data are subject to revision.
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WFO Monthly/Daily Climate Data

CXUS55 KLOT 010700 CF6ORD

PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6)

STATION: CHICAGO-OHARE IL

MONTH: MARCH 2011 41 58 N 87 54 W YEAR: LATITUDE: LONGITUDE:

T	TEMPERATURE IN F:				:	:	PCPN:		SNOW:	WIN	ND		:SUN	SHINE	: SK	Y	: PK	W	ND_
1	2	3	4	5	6А	6в	7	8	9 12z	10 AVG	11 MY	12 2MIN	13	14	15	16	17		18
DY	MAX	MIN	AVG	DEP	HDD	CDD	WTR	SNW	DPTH				MIN	PSBL	S-S	WX	SP	D [	OR
1234567890112315111111111111111111111111111111111	437 457 457 447 441 442 443 444 444 457 444 457 444 457 444 457 457	2245576422333278463128441782445312463	3155523999957633456849910522293366	1 -12 -12 -4 -5 -5 4 0 10 -3 -3 -2 9 0 6 10 -12 -12 -12 -13 -16 -6 -6	34400335663299310971266445036662999 ================================	000000000000000000000000000000000000000	0.00 0.00 1.11 0.16 0.00 0.00 0.01 0.39 T 0.00 0.0	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	000000000000000000000000000000000000000	10.6 12.6 7.3 17.3 8.3 9.6 8.3 16.3 16.3 16.3 11.3 11.3 11.3 11.3 11	201228 20128 20128 20128 20128 20128 20128 20128 20128 20128 20128 20128 20128 20128 20128 20128 201	150 10 10 170 40 330 340 210 280 300 200 210 300 120 120 290 40 40 50 30	M M M M M M	M M M M M M M M M M M M M M M M M M M	1099910648689698499854854	1 1 1 1 1 1 1 1 1 3 1 3 1 3 1 1	2 4 2 2 2 3 3 2 2 3 3 3 3 3 2 2 2 2 2 2	856715839203444316990582711684	210 150 150 190 310 190 310 210 310 210 310 310 310 310 310 310 310 310 310 3
===		====			880 ====	0 ====	2.62				====								
AV	43.8	3 28	. 8						C			STST 280		M 	7 ====		MAX(M 40 2	PH) 90	)· ====

#### NOTES:

# LAST OF SEVERAL OCCURRENCES

COLUMN 17 PEAK WIND IN M.P.H.

PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6), PAGE 2

STATION: CHICAGO-OHARE IL

MONTH: MARCH YEAR: 2011 LATITUDE: 41 58 N

87 54 W LONGITUDE:

#### [TEMPERATURE DATA] [PRECIPITATION DATA] 2.62 AVERAGE MONTHLY: 36.3 TOTAL FOR MONTH: DPTR FM NORMAL: DPTR FM NORMAL: -1.0 -0.03 **HIGHEST:** 67 ON 17 GRTST 24HR 1.11 ON 4-4 LOWEST: 21 ON 28 3 = THUNDERSNOW, ICE PELLETS, HAIL 4 = ICE PELLETS TOTAL MONTH: 1.0 INCH 5 = HAIL0.7 ON GRTST 24HR М GRTST DEPTH: 1 ON 6 [NO. OF DAYS WITH]

# [WEATHER - DAYS WITH]

MAX 32 OR BELOW: 0.01 INCH OR MORE: 1 6 MAX 90 OR ABOVE: 0 0.10 INCH OR MORE: 24 MIN 32 OR BELOW: 0.50 INCH OR MORE: 1 MIN O OR BELOW: 0 1.00 INCH OR MORE: 1

[HDD (BASE 65) ] TOTAL THIS MO. CLEAR (SCALE 0-3) PTCLDY (SCALE 4-7) 880 0 DPTR FM NORMAL 22 16 TOTAL FM JUL 1 5694 CLOUDY (SCALE 8-10) 15 DPTR FM NORMAL -10

[CDD (BASE 65)] 0 TOTAL THIS MO. DPTR FM NORMAL -1 TOTAL FM JAN 1 0 DPTR FM NORMAL -1

[PRESSURE DATA] HIGHEST SLP M ON M LOWEST SLP 29.01 ON 31

[REMARKS] #FINAL-03-11# SYMBOLS USED IN COLUMN 16

1 = FOG OR MIST

2 = FOG REDUCING VISIBILITY

TO 1/4 MILE OR LESS

6 = FREEZING RAIN OR DRIZZLE 7 = DUSTSTORM OR SANDSTORM:

VSBY 1/2 MILE OR LESS

8 = SMOKE OR HAZE9 = BLOWING SNOW

X = TORNADO

Explanation of the Preliminary Monthly Climate Data (F6) Product These data are preliminary and have not undergone final quality control by the National Climatic Data Center (NCDC). Therefore, these data are subject to revision. Final and certified climate data can be accessed at the NCDC - http://www.ncdc.noaa.gov.

WFO Monthly/Daily Climate Data

000 CXUS55 KLOT 010700 CF6ORD

PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6)

STATION: CHICAGO-OHARE IL

MONTH: APRIL 2011
LATITUDE: 41 58 N
LONGITUDE: 87 54 W

TEMPERATURE IN F:	: PCPN:	SNOW:	WIND	:SUNSHINE: SKY	:PK WND
1 2 3 4 5 6A	6в 7	8 9 12z	10 11 12 AVG MX 2MIN	13 14 15 16	17 18
DY MAX MIN AVG DEP HDD	CDD WTR			MIN PSBL S-S WX	SPD DR
1 45 28 37 -6 28 2 54 36 45 2 20 3 72 35 54 11 11 4 68 40 54 10 11 5 53 33 43 -1 22 6 59 42 51 7 14 7 46 39 43 -2 22 8 45 40 43 -2 22 9 66 44 55 9 10 10 83 56 70 24 0 11 67 44 56 10 9 10 83 68 36 52 5 13 14 53 40 47 0 18 15 51 37 44 -4 21 13 68 36 52 5 13 14 53 40 47 0 18 15 51 37 44 -4 21 16 49 35 42 -6 23 17 53 35 44 -4 21 18 41 32 37 -12 28 18 41 32 37 -12 28 18 41 32 37 -12 28 18 41 32 37 -12 28 19 38 34 36 -13 29 20 43 32 38 -11 27 21 50 32 41 -9 22 22 46 39 43 -7 22 22 46 39 43 -7 22 22 46 39 43 -7 22 23 64 45 55 5 10 25 54 45 50 -1 15 26 68 47 58 7 7 27 55 43 49 -3 16 28 45 40 43 -9 22 29 62 36 49 -4 16 30 71 48 60 7	0 0.00 0 0.13 0 0.11 0 0.00 0 T 0 0.25 0 0.51 0 0.00 0 T 0 0.00 0 T 0 0.34 0 0.20 0 0.49 0 0.49 0 0.49 0 0.49 0 0.08 0 0.49 0 0.56 0 0.00 0 0.00 0 0.03 0 0.56 0 0.03 0 0.34 0 0.38 0 0.31 0 0.38 0 0.31 0 0.03 0 0.00 0 0.00		6.8 17 340 10.0 22 290 14.7 32 210 16.6 33 220 12.4 22 190 7.1 15 200 8.7 17 90 8.9 17 60 7.1 15 120 18.9 31 210 13.6 25 280 9.4 17 20 3.5 14 90 17.4 25 30 18.3 26 70 14.0 26 280 13.8 28 290 13.6 20 40 17.8 26 30 11.6 21 280 8.1 17 70 12.0 25 120 11.4 28 260 7.1 14 50 10.4 22 100 16.4 31 230 7.2 18 300 12.6 22 260 6.9 16 100 18.5 31 170	M M 9 18 M M 6 M M 9 3 M M 9 13 M M 9 13 M M 6 M M 9 18 M M 10 18 M M 10 1 M M 7 18 M M 6 1 M M 7 18 M M 6 1 M M 7 18 M M 10 1 M M 7 18 M M 10 138 M M 10 1 M M 8 M M 9 14 M M 10 135 M M 8 1 M M 9 13 M	23 350 26 300 40 210 43 220 25 280 15 200 28 60 24 50 23 70 40 210 33 30 28 30 16 110 37 30 38 60 36 300 35 270 38 50 28 280 30 120 36 250 27 29 50 41 210 23 300 30 270 21 100 41 150
AV 56.1 39.3		MISC			MAX(MPH) 13 220

NOTES:

# # LAST OF SEVERAL OCCURRENCES

COLUMN 17 PEAK WIND IN M.P.H.

PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6) , PAGE 2

STATION: CHICAGO-OHARE IL MONTH: APRIL

MONTH: APRIL
YEAR: 2011
LATITUDE: 41 58 N
LONGITUDE: 87 54 W

[TEMPERATURE DATA]	[PRECIPITATION DATA]	SYMBOLS USED IN COLUMN 16
AVERAGE MONTHLY: 47.7 DPTR FM NORMAL: -0.1 HIGHEST: 83 ON 10 LOWEST: 28 ON 1	TOTAL FOR MONTH: 4.90 DPTR FM NORMAL: 1.22 GRTST 24HR 0.96 ON 19-20  SNOW, ICE PELLETS, HAIL TOTAL MONTH: 0.6 INCH GRTST 24HR 0.6 ON M GRTST DEPTH: 1 ON 18	<pre>1 = FOG OR MIST 2 = FOG REDUCING VISIBILITY     TO 1/4 MILE OR LESS 3 = THUNDER 4 = ICE PELLETS 5 = HAIL 6 = FREEZING RAIN OR DRIZZLE 7 = DUSTSTORM OR SANDSTORM:     VSBY 1/2 MILE OR LESS</pre>
[NO. OF DAYS WITH]	[WEATHER - DAYS WITH]	8 = SMOKE OR HAZE 9 = BLOWING SNOW
MAX 32 OR BELOW: 0 MAX 90 OR ABOVE: 0 MIN 32 OR BELOW: 4 MIN 0 OR BELOW: 0	0.01 INCH OR MORE: 17 0.10 INCH OR MORE: 13 0.50 INCH OR MORE: 3 1.00 INCH OR MORE: 0	X = TORNADO
[HDD (BASE 65)] TOTAL THIS MO. 516 DPTR FM NORMAL 3 TOTAL FM JUL 1 6210 DPTR FM NORMAL -7	CLEAR (SCALE 0-3) 1 PTCLDY (SCALE 4-7) 11 CLOUDY (SCALE 8-10) 18	
[CDD (BASE 65)] TOTAL THIS MO. 5 DPTR FM NORMAL -4 TOTAL FM JAN 1 5 DPTR FM NORMAL -5	[PRESSURE DATA] HIGHEST SLP M ON M LOWEST SLP 29.14 ON 3	
[REMARKS] #FINAL-04-11#		

Explanation of the Preliminary Monthly Climate Data (F6) Product These data are preliminary and have not undergone final quality control by the National Climatic Data Center (NCDC). Therefore, these data are subject to revision. Final and certified climate data can be accessed at the NCDC - http://www.ncdc.noaa.gov.

WFO Monthly/Daily Climate Data

000 CXUS55 KLOT 012338 CF60RD

PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6)

STATION: CHICAGO-OHARE IL

MONTH: MAY
YEAR: 2011
LATITUDE: 41 58 N
LONGITUDE: 87 54 W

TEMPERATURE IN F:			:	PCPN:		SNOW:	MIN	ID		: SUNS	SHINE	: SK	Y	; PK	WND			
1	2	3	4	5	6A	6в	7	8	9 12z	10 AVG	11 MY	 12 2мты	13	14	15	16	17	18
DY ===	MAX	MIN	AVG	DEP	HDD	CDD	WTR	SNW	DPTH				MIN	PSBL	S-S	WX	SPD	DR
1 2 3 4 5 6 7 8 9 100 111 12 13 144 15 167 18 9 201 222 234 25 26 27 28 30 31	63 59 59 68 60 68 73 86 73 86 73 86 77 73 87 76 67 88 70 88 71 88 72 88 73 88 73 88 73 88 74 88 74 88 74 88 74 88 74 88 74 88 88 74 88 74 88 74 88 88 74 88 88 74 88 88 88 88 88 88 88 88 88 88 88 88 88	47 42 37 33 44 43 43 43 43 43 43 43 43 43 43 43	5514489554489554485544450556127757649757762944503561277777888	2 -3 -10 -6 -6 -1 -4 -9 -14 -9 -14 -19 -14 -14 -14 -15 -15 -16 -17 -18 -18 -18 -18 -18 -18 -18 -18 -18 -18	10 14 21 17 16 9 13 11 5 0 0 0 3 16 21 20 15 12 4 3 2 0 0 8 8 19 16 8 8 10 10 10 10 10 10 10 10 10 10 10 10 10	00000000000000000000000000000000000000	0.00 0.00 0.00 0.06 T 0.00 0.13 0.29 0.02 0.31 0.00 0.07 0.00 0.07 0.00 0.07 0.00 0.11 2.24 1.06 T 0.12 1.88 0.00 0.08	0.000000000000000000000000000000000000	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	11.5 9.6 7.6 11.5 14.7 14.7 14.7 16.9 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11	17565 17565	60 40 20 190 290 70 60 110 160 310 280 20 40 20 60 60 50 160 300 20 20 20 20 20 20 20 20 20 20 20 20 2	M M M M M M M M M M M M M M M M M M M	M M M M M M M M M M M M M M M M M M M	7887759486589101608685760979035 221	18 18 18 135 18 123 1 12 123 1 3	36 32 25 28 29 28 23 29 31 37 38 39 36 33 31 36 33 36 36 37 38 38 38 38 38 38 38 38 38 38 38 38 38	60 30 50 200 290 50 60 120 70 310 260 40 50 60 60 160 300 240 40 10 10 10 10 10 10 10 10 10 10 10 10 10
===	67.8	====	====	====			=====	====		=====		==== STST	 M	===== M	 7	====: i	===== MAX(MP	:==== PH)
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LOWEST:

# LAST OF SEVERAL OCCURRENCES

COLUMN 17 PEAK WIND IN M.P.H.

PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6) , PAGE 2

STATION: CHICAGO-OHARE IL

MONTH: MAY 2011 YEAR: LATITUDE:

41 58 N LONGITUDE: 87 54 W

[TEMPERATURE DATA]

[PRECIPITATION DATA]

SYMBOLS USED IN COLUMN 16

AVERAGE MONTHLY: 57.9 DPTR FM NORMAL: -0.8 90 ON 10 HIGHEST: 35 ON 5

7.27 TOTAL FOR MONTH: DPTR FM NORMAL: 3.89 GRTST 24HR 3.18 ON 25-26

2 = FOG REDUCING VISIBILITY TO 1/4 MILE OR LESS 3 = THUNDER

SNOW, ICE PELLETS, HAIL TOTAL MONTH: T

5 = HAILT ON 22-22

GRTST 24HR GRTST DEPTH:

6 = FREEZING RAIN OR DRIZZLE 7 = DUSTSTORM OR SANDSTORM: VSBY 1/2 MILE OR LESS

8 = SMOKE OR HAZE9 = BLOWING SNOW

X = TORNADO

1 = FOG OR MIST

4 = ICE PELLETS

[NO. OF DAYS WITH] [WEATHER - DAYS WITH]

MAX 32 OR BELOW: 0 0.01 INCH OR MORE: MAX 90 OR ABOVE: 0.10 INCH OR MORE: 1 10 MIN 32 OR BELOW: 0 0.50 INCH OR MORE: 4 0 1.00 INCH OR MORE: 3 MIN O OR BELOW:

[HDD (BASE 65) ] CLEAR (SCALE 0-3) 2 PTCLDY (SCALE 4-7) 17 CLOUDY (SCALE 8-10) 12 275 TOTAL THIS MO. DPTR FM NORMAL 43 6485 TOTAL FM JUL 1 DPTR FM NORMAL 36

[CDD (BASE 65) ] TOTAL THIS MO. 61 DPTR FM NORMAL 13

[PRESSURE DATA] HIGHEST SLP 30.42 ON 4 LOWEST SLP 29.54 ON 23 TOTAL FM JAN 1 66 DPTR FM NORMAL 8

[REMARKS] #FINAL-05-11#

Untitled
Explanation of the Preliminary Monthly Climate Data (F6) Product
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National Climatic Data Center (NCDC). Therefore, these data are subject to revision.
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WFO Monthly/Daily Climate Data

CXUS55 KLOT 010700 CF6ORD

PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6)

STATION: CHICAGO-OHARE IL

MONTH: JUNE 2011 YEAR: LATITUDE: 41 58 N LONGITUDE: 87 54 W

The state of the s	TEMPERATURE IN F: :PCP					PCPN:		SNOW:	WI	ND		: SUNS	SHINE	: SK	Y	; P	K W	/ND		
1 81 59 70 6 0 5 0.00 0.0 0 10.5 25 280 M M 3 36 250 26 60 65 66 63 -2 2 0 0.02 0.0 0 0.1 1.5 22 170 M M 6 8 26 170 4 92 64 78 13 0 13 0.18 0.0 0 8.5 23 40 M M 3 8 28 30 5 85 60 73 8 0 8 T 0.0 0 0.0 0 10.6 22 210 M M 5 26 60 6 93 60 77 11 0 12 0.00 0.0 0 0 10.6 22 210 M M 3 30 240 7 96 75 86 20 0 21 0.00 0.0 0 10.6 22 210 M M 2 28 210 8 95 66 81 15 0 16 0.17 0.0 0 13.4 36 300 M M 6 13 47 300 9 69 50 60 -7 5 0 0.93 0.0 0 12.5 26 60 M M 10 135 37 40 10 6 95 16 60 -7 5 0 0.52 0.0 0 8.0 17 20 M M 10 138 28 50 11 62 52 57 -10 8 0 0.03 0.0 0 5.7 15 50 M M 9 128 24 40 12 64 50 57 -10 8 0 0.00 0.0 0 0 7.8 15 70 M M 9 128 24 40 12 64 50 57 -10 8 0 0.00 0.0 0 0 7.8 15 70 M M 9 13 37 120 15 77 15 76 64 -4 1 0 0.80 0.0 0 0.0 0 7.5 17 290 M M 9 13 37 120 15 77 82 60 71 2 0 6 0.04 0.00 0.0 0 0 7.5 17 290 M M 9 13 37 120 15 77 82 60 71 2 0 6 0.04 0.00 0.0 0 0 1.2 2 2 10 M M 9 18 18 70 2 79 86 66 72 3 0 7 0.00 0.00 0.0 0 1.2 2 2 10 M M 9 13 37 120 15 77 66 72 3 0 0 0 0.00 0.0 0 0 0 0 0 0 0 0 0 0 0	1	2	3	4	5	6A	6в	7	8	_				13	14	15	16	5 1	.7	18
2 69 56 63 -2 2 0 0.02 0.0 0 9.4 18 40 M M 8 M 6 26 170 4 92 64 78 13 0 13 0.18 0.0 0 8.5 23 40 M M 6 38 28 30 5 85 60 73 8 0 8 T 0.0 0 5.4 13 70 M M 5 26 60 6 93 60 77 11 0 12 0.00 0.0 0 10.6 22 210 M M 2 28 210 8 95 66 81 15 0 16 0.17 0.0 0 13.4 36 300 M M 6 13 47 300 9 69 50 60 -7 5 0 0.93 0.0 0 12.5 26 60 M M 10 135 37 40 10 69 51 60 -7 5 0 0.52 0.0 0 8.0 17 20 M M 10 135 37 40 11 62 52 57 -10 8 0 0.03 0.0 0 5.7 15 50 M M 9 128 24 40 12 64 50 57 -10 8 0 0.00 0.0 0 0 8.9 20 50 M M 7 1 29 40 13 72 54 63 -5 2 0 0.00 0.0 0 0 7.8 15 70 M M 6 31 60 14 77 53 65 -3 0 0 0.00 0.0 0 0 8.6 18 130 M M 9 13 37 120 16 81 61 71 2 0 6 0.04 0.0 0 7.5 17 290 M M 5 1 24 270 17 82 60 71 2 0 6 0.04 0.0 0 7.5 17 290 M M 9 13 37 120 16 81 61 71 2 0 6 0.04 0.0 0 7.5 17 290 M M 9 13 37 120 16 81 61 71 2 0 6 0.04 0.0 0 7.5 17 290 M M 9 13 37 120 17 82 60 71 2 0 6 0.04 0.0 0 7.5 17 290 M M 9 13 37 120 18 84 61 73 4 0 8 0.00 0.0 0 0.0 11.2 32 110 M 9 9 13 23 160 18 84 61 73 4 0 8 0.00 0.0 0 0.0 0 6.6 16 50 M M 7 25 60 18 84 61 73 4 0 8 0.00 0.0 0 0 11.2 32 110 M 9 9 13 23 160 21 89 66 78 8 0 13 0.45 0.0 0 12.1 55 210 M 9 13 23 160 21 89 66 78 8 0 13 0.45 0.0 0 12.1 55 210 M 9 13 23 160 22 73 64 69 -1 0 4 0.02 0.0 0 13.4 25 230 M M 8 1 37 230 23 71 62 67 -3 0 2 0.01 0.0 0.0 12.7 22 280 M M 10 12 29 280 24 68 60 64 -6 1 0 0.00 0.0 0 0.0 12.7 22 280 M M 10 12 29 280 24 68 60 64 -6 1 0 0.00 0.0 0 0.0 12.7 22 280 M M 10 12 29 380 24 68 60 64 -6 1 0 0.00 0.0 0 0.0 12.7 22 280 M M 10 12 29 380 25 79 58 69 -2 0 4 0.00 0.0 0 0.0 12.7 22 280 M M 10 12 29 380 30 88 60 74 2 0 9 T 0.0 0 0.0 0 5.4 13 80 M 9 2 23 80 30 88 60 74 2 0 9 T 0.0 0 0.0 0 5.4 13 80 M M 2 2 23 80 30 88 60 74 2 0 9 T 0.0 0 0.0 0 5.4 13 80 M M 2 24  80 79.4 59.5	DY ===	MAX	MIN	AVG	DEP	HDD	CDD	WTR	SNW					MIN	PSBL	S-S	WX	S	PD	DR
AV 79.4 59.5 9.0 FASTST M M 7 MAX(MPH)	2345678901123145167189012234567890 11121341561789012234567890	69 87 92 85 96 95 69 62 771 81 82 84 79 81 81 81 81 81	565640056605555555556066666666666666666	631 778 778 810 607 573 664 771 772 778 677 774 866 873 774	-26 138 110 157 -100 -105 -34 -224 338 -136 -221 -12	2000005558820100000000000000000000000000	06 13 8 12 21 16 00 00 00 06 66 87 77 13 42 04 44 87 59	0.02 0.01 0.18 T 0.00 0.00 0.17 0.93 0.52 0.03 0.00 0.00 0.00 0.00 0.04 0.00 0.18 0.02 0.01 0.00 0.03 0.00 0.03	0.0000000000000000000000000000000000000	000000000000000000000000000000000000000	9.4 11 8 9 10 12 8 12 8 11 12 13 14 9 14 9 10 10 11 12 12 13 14 15 16	4 18 22 36 4 23 36 36 4 21 1 5 25 27 66 4 31 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	40 170 40 70 210 300 60 20 50 70 130 110 290 50 710 150 230 280 300 160 320 80	M M M M M M M M M M M M M M M M M M M	M M M M M M M M M M M M M M M M M M M	8665326010976995799998010857126	13 135 138 128 1 1 13 1 1 18 13 1 1	}	M628632847782293257452248327379322365843	M 170 30 60 240 210 300 40 50 40 60 70 120 270 60 70 160 230 280 320 80
: : : <del> :</del>	AV										9.0			==== M	===== М	7	==== #		•	-

NOTES:

Page 1

# # LAST OF SEVERAL OCCURRENCES

COLUMN 17 PEAK WIND IN M.P.H.

PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6), PAGE 2

STATION: CHICAGO-OHARE IL

MONTH: JUNE 2011 YEAR:

LATITUDE: 41 58 N LONGITUDE: 87 54 W

[TEMPERATURE DATA]	[PRECIPITATION DATA]	SYMBOLS USED IN COLUMN 16						
DPTR FM NORMAL: 1.2	SNOW, ICE PELLETS, HAIL TOTAL MONTH: 0.0 INCH	2 = FOG REDUCING VISIBILITY TO 1/4 MILE OR LESS 3 = THUNDER 4 = ICE PELLETS 5 = HAIL 6 = FREEZING RAIN OR DRIZZLE 7 = DUSTSTORM OR SANDSTORM: VSBY 1/2 MILE OR LESS						
[NO. OF DAYS WITH]	[WEATHER - DAYS WITH]	8 = SMOKE OR HAZE 9 = BLOWING SNOW X = TORNADO						
	0.01 INCH OR MORE: 14 0.10 INCH OR MORE: 7 0.50 INCH OR MORE: 3 1.00 INCH OR MORE: 0	X = TORRIADO						
[HDD (BASE 65) ] TOTAL THIS MO. 32 DPTR FM NORMAL -17 TOTAL FM JUD 1 6517	PTCLDY (SCALE 4-7) 15							

171 TOTAL THIS MO. DPTR FM NORMAL

12 237 [PRESSURE DATA] TOTAL FM JAN 1

19

HIGHEST SLP M ON M LOWEST SLP 29.53 ON 21 20 DPTR FM NORMAL

[REMARKS] #FINAL-06-11#

DPTR FM NORMAL

[CDD (BASE 65)]

Untitled
Explanation of the Preliminary Monthly Climate Data (F6) Product
These data are preliminary and have not undergone final quality control by the
National Climatic Data Center (NCDC). Therefore, these data are subject to revision.
Final and certified climate data can be accessed at the NCDC http://www.ncdc.noaa.gov.

WFO Monthly/Daily Climate Data

CXUS55 KLOT 010700 CF60RD

PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6)

STATION: CHICAGO-OHARE IL

MONTH: JULY 2011 YEAR: LATITUDE: 41 58 N LONGITUDE: 87 54 W

TEMPE	EMPERATURE IN F: :PCPN: SNOW: WIND :SUNSHINE: SKY						:PK	WND									
1 2	3	4	5	6А	6в	7	8	9 12z	10 AVG	11	12	13	14	15	16	17	18
DY MAX I	MIN ====	AVG	DEP	HDD	CDD	WTR	SNW	DPTH				MIN	PSBL	S-S	WX	SPD	DR
1 89 2 94 3 84 4 89 5 86 7 82 8 99 110 11 88 12 74 13 74 14 82 15 89 17 18 12 99 17 18 18 99 17 18 18 87 18 88 19 99 18 87 21 88 21 99 22 88 23 87 25 88 26 87 29 86 30 91 31 90 SM 2745		====	9 11 5 5 8 6 0 1 3 0 7 6 4 4 2 6 6 8 2 12 12 13 5 5 6 7 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	_	18 12 15 13 18 15 14 14 15 17 21 21 21 21 14 15 14 14 14 14 14 14 14	0.00 0.00 0.00 0.00 0.00 T T 0.00 0.00	0.0000000000000000000000000000000000000		8.5 4.6 7.6 6.7 6.6 7.6 6.7 10.8 6.8 10	17 17 14 13 16 16 17 16 16 17 16 16 17 16 16 17 16 16 17 16 16 17 16 16 16 17 16 16 16 16 16 16 16 16 16 16 16 16 16	170 300 330 90 100 180 200 230 300 300 340 50 340 50 320 60 280	M M M M M M M M M M M M M M M M M M M		9 8 3 5 9 8 7 2 3 174	1	22 31 25 24 16 18 28 24 37 37 37 37 37 37 37 37 37 37 37 37 37	50 40 50 280 50 50 60 60 60 60 70 70 70 70 70 70 70 70 70 70 70 70 70
AV 88.5	69.	5						C	-> #	<b># 47</b>	STST 300	M	M	6		MAX (MF 63 33	.0

#### NOTES:

# LAST OF SEVERAL OCCURRENCES

COLUMN 17 PEAK WIND IN M.P.H.

PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6), PAGE 2

STATION: CHICAGO-OHARE IL

MONTH: JULY YEAR: 2011

LATITUDE: 41 58 N

	LONGITUD	DE: 87 54 W
[TEMPERATURE DATA]	[PRECIPITATION DATA]	SYMBOLS USED IN COLUMN 16
DPTR FM NORMAL: 5.7	TOTAL FOR MONTH: 11.15 DPTR FM NORMAL: 7.64 GRTST 24HR 8.21 ON 22-23  SNOW, ICE PELLETS, HAIL TOTAL MONTH: 0.0 INCH GRTST 24HR 0.0 GRTST DEPTH: 0	<pre>2 = FOG REDUCING VISIBILITY     TO 1/4 MILE OR LESS 3 = THUNDER 4 = ICE PELLETS 5 = HAIL 6 = FREEZING RAIN OR DRIZZLE 7 = DUSTSTORM OR SANDSTORM:     VSBY 1/2 MILE OR LESS</pre>
[NO. OF DAYS WITH]	[WEATHER - DAYS WITH]	8 = SMOKE OR HAZE 9 = BLOWING SNOW X = TORNADO
MAX 32 OR BELOW: 0 MAX 90 OR ABOVE: 12 MIN 32 OR BELOW: 0 MIN 0 OR BELOW: 0	0.01 INCH OR MORE: 11 0.10 INCH OR MORE: 7 0.50 INCH OR MORE: 5 1.00 INCH OR MORE: 2	X = TORNADO
[HDD (BASE 65)] TOTAL THIS MO. 0 DPTR FM NORMAL -6 TOTAL FM JUL 1 0 DPTR FM NORMAL -6	CLEAR (SCALE 0-3) 5 PTCLDY (SCALE 4-7) 23 CLOUDY (SCALE 8-10) 3	
[CDD (BASE 65)] TOTAL THIS MO. 444 DPTR FM NORMAL 165 TOTAL FM JAN 1 681 DPTR FM NORMAL 185	[PRESSURE DATA] HIGHEST SLP M ON M LOWEST SLP 29.75 ON 20	
[REMARKS] #FINAL-07-11#		

Untitled
Explanation of the Preliminary Monthly Climate Data (F6) Product
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National Climatic Data Center (NCDC). Therefore, these data are subject to revision.
Final and certified climate data can be accessed at the NCDC http://www.ncdc.noaa.gov.

WFO Monthly/Daily Climate Data

CXUS55 KLOT 010700 CF60RD

PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS. FORM: F-6)

STATION: CHICAGO-OHARE

MONTH: **AUGUST** 2011 41 58 N 87 54 W YEAR: LATITUDE: LONGITUDE:

TEMPERATURE IN F:	:PCPN:	SNOW:	WIND	WIND :SUNSHINE: SKY		
1 2 3 4 5 6	6A 6B 7		10 11 12 AVG MX 2MIN	13 14	15 16	17 18
DY MAX MIN AVG DEP H	IDD CDD WTR		SPD SPD DIR	MIN PSBL	S-S WX	SPD DR
1 91 74 83 9 2 93 74 84 10 3 86 72 79 5 4 84 69 77 3 5 83 69 76 3 6 85 72 79 6 7 86 68 77 4 8 80 68 74 1 9 80 64 72 -1 10 77 61 69 -4 11 81 57 69 -4 11 81 57 69 -4 12 81 60 71 -2 13 83 62 73 0 14 75 62 69 -4 15 82 57 70 -3 16 85 61 73 0 17 83 62 73 0 18 84 67 76 4 19 87 64 76 4 20 80 66 73 1 21 80 64 72 0 22 82 59 71 -1 23 73 62 68 -4 24 92 69 81 9 25 83 64 74 2 26 83 59 71 0 27 81 64 73 2 28 77 61 69 -2 29 79 59 69 -2 30 76 61 69 -1 31 87 65 76 6	0 18 0.00 0 19 0.43 0 14 0.00 0 12 0.00 0 11	0.0 0 0.0 0 0.	4.9 12 320 9.1 38 300 8.0 18 50 6.0 14 70 5.5 13 50 4.0 10 60 6.4 33 320 6.2 21 110 11.1 24 300 8.7 17 330 3.0 9 240 8.5 20 180 6.7 36 330 11.7 22 350 4.9 10 100 3.9 13 90 6.0 14 220 5.2 10 60 5.2 12 100 3.4 28 330 8.5 18 310 4.1 13 260 9.8 23 280 10.7 21 310 7.3 16 340 3.3 10 260 9.2 20 7.9 17 40 3.5 14 50 6.3 15 110 8.3 15 180	M M M M M M M M M M M M M M M M M M M	6 10 138 5 7 4 1 5 138 8 13 3 1 4 1 6 8 13 5 18 5 18 5 13 2 1 1 3 3 6 3 9 4 150	17 270 51 310 29 60 24 60 25 60 20 40 41 320 26 110 35 290 23 340 13 240 25 180 43 320 30 10 22 60 16 100 17 200 18 30 20 220 33 330 24 340 17 280 33 300 26 340 27 280 38 50 17 70 18 120 22 240
	U 2/1 4.54					======================================
AV 02.J 04.4		MISC	6.7 FASTST > # 38 300	м м	5 M, # 5:	AX(MPH) 1 310

# NOTES:

[REMARKS] #FINAL-08-11#

# LAST OF SEVERAL OCCURRENCES

COLUMN 17 PEAK WIND IN M.P.H.

PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6) , PAGE 2

STATION: CHICAGO-OHARE

MONTH: AUGUST YEAR: 2011 LATITUDE: 41 58 N LONGITUDE: 87 54 W

	LONGITOD	DE. 07 34 W				
[TEMPERATURE DATA]	[PRECIPITATION DATA]	SYMBOLS USED IN COLUMN 16				
AVERAGE MONTHLY: 73.5 DPTR FM NORMAL: 1.1 HIGHEST: 93 ON 2 LOWEST: 57 ON 15,11	SNOW, ICE PELLETS, HAIL TOTAL MONTH: 0.0 INCH	2 = FOG REDUCING VISIBILITY TO 1/4 MILE OR LESS 3 = THUNDER 4 = ICE PELLETS 5 = HAIL 6 = FREEZING RAIN OR DRIZZLE 7 = DUSTSTORM OR SANDSTORM: VSBY 1/2 MILE OR LESS				
[NO. OF DAYS WITH]	[WEATHER - DAYS WITH]	8 = SMOKE OR HAZE 9 = BLOWING SNOW X = TORNADO				
MAX 90 OR ABOVE: 3	0.01 INCH OR MORE: 8 0.10 INCH OR MORE: 7 0.50 INCH OR MORE: 5 1.00 INCH OR MORE: 1	X = TORNADO				
[HDD (BASE 65) ] TOTAL THIS MO. 0 DPTR FM NORMAL -9 TOTAL FM JUL 1 0 DPTR FM NORMAL -13	CLEAR (SCALE 0-3) 7 PTCLDY (SCALE 4-7) 21 CLOUDY (SCALE 8-10) 3					
[CDD (BASE 65)] TOTAL THIS MO. 271 DPTR FM NORMAL 33 TOTAL FM JAN 1 952 DPTR FM NORMAL 212	[PRESSURE DATA] HIGHEST SLP M ON M LOWEST SLP 29.63 ON 2					

Chicago Weather Data.2011.Sep.txt
Explanation of the Preliminary Monthly Climate Data (F6) Product
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National Climatic Data Center (NCDC). Therefore, these data are subject to revision.
Final and certified climate data can be accessed at the NCDC http://www.ncdc.noaa.gov.

WFO Monthly/Daily Climate Data

000 CXUS55 KLOT 031715 CF6ORD

PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6)

STATION: CHICAGO-OHARE
MONTH: SEPTEMBER
YEAR: 2011
LATITUDE: 41 58 N
LONGITUDE: 87 54 W

-	ГЕМРЕ	RATI	JRE I	IN F	:	:	PCPN:		SNOW:	W: WIND :SUNSHINE: SKY			:PK	:PK WND				
1	2	3	4	5	6A	6в	7	8	9 12z	10 AVG	11 MX	12 2MIN	13	14	15	16	17	18
DY ===	MAX	MIN ====	AVG	DEP	HDD	CDD	WTR	SNW	DPTH				MIN	PSBL	S-S	WX	SPD	DR
12345678901121314516178902122342267890====================================	93 93 93 83 66 77 77 83 86 73 86 77 86 66 67 71 66 66 67 66 67 67 67 67 67 67 67 67 67	71698555766574460554955545554955549555495554955549555	82496666705531 82496666705531 82496666705531 8259662248557879881	12 14 10 -30 -12 -13 -14 -13 -14 -13 -14 -14 -14 -14 -14 -14 -14 -14 -14 -14	0000664000000121413653317087867714	19 14 1 0 0 0 1 1 2 5 10 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0.00 0.00 0.00 0.08 0.00 0.00 0.00 0.43 0.24 0.00 T 0.00 0.14 0.08 1.21 0.77 0.06 0.09	0.000.0000.0000000000000000000000000000	000000000000000000000000000000000000000	5.2 7.2 11.8 10	17022602351942206023153163435530 18122602351942206023153163155125330 181226023153163163163163163163163163163163163163163	210 250 320 330 10 40 50 30 140 280 220 310 340 280 240 240 240 240 200 140 290 320 320	M M M M M M M M M M M M M M M M M M M	M M M M M M M M M M M M M M M M M M M		8 8 1 1 1 8 18 18 11 1 1 1 1 1	23 23 24 28 35 29 30 33 25 14 20 28 27 28 27 28 20 18 30 20 25 20 16 31 23 25 46 38	260 320 320 50 40 60 110 270 250 310 10 160 260 40 40 140 200 290 330
===	2098	====	=		147 	70 =====	3.45 =====		0.0 2	260.4 =====		====	M =====		190		=======	
AV ===	69.9 ====	54, ====	. 4 =====			<del></del>		MISC				STST 290	M =====	M 	6	#	MAX(MP 46 29	

NOTES:

# Chicago Weather Data.2011.Sep.txt

# LAST OF SEVERAL OCCURRENCES

COLUMN 17 PEAK WIND IN M.P.H.

[REMARKS] #FINAL-09-11#

PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6) , PAGE 2

STATION: CHICAGO-OHARE MONTH: SEPTEMBER 2011 YEAR: LATITUDE: 41 58 N LONGITUDE: 87 54 W

[TEMPERATURE DATA]	[PRECIPITATION DATA]	SYMBOLS USED IN COLUMN 16						
AVERAGE MONTHLY: 62.2 DPTR FM NORMAL: -2.4 HIGHEST: 93 ON 1 LOWEST: 42 ON 15	TOTAL FOR MONTH: 3.45 DPTR FM NORMAL: 0.24 GRTST 24HR 1.28 ON 25-26  SNOW, ICE PELLETS, HAIL TOTAL MONTH: 0.0 INCH GRTST 24HR 0.0 GRTST DEPTH: 0	2 = FOG REDUCING VISIBILITY TO 1/4 MILE OR LESS 3 = THUNDER 4 = ICE PELLETS 5 = HAIL 6 = FREEZING RAIN OR DRIZZLE 7 = DUSTSTORM OR SANDSTORM: VSBY 1/2 MILE OR LESS						
[NO. OF DAYS WITH]	[WEATHER - DAYS WITH]	8 = SMOKE OR HAZE 9 = BLOWING SNOW X = TORNADO						
MAX 90 OR ABOVE: 2 MIN 32 OR BELOW: 0	0.01 INCH OR MORE: 12 0.10 INCH OR MORE: 6 0.50 INCH OR MORE: 2 1.00 INCH OR MORE: 1	X = TORNADO						
[HDD (BASE 65)] TOTAL THIS MO. 147 DPTR FM NORMAL 42 TOTAL FM JUL 1 147 DPTR FM NORMAL 29	CLEAR (SCALE 0-3) 2 PTCLDY (SCALE 4-7) 20 CLOUDY (SCALE 8-10) 8							
[CDD (BASE 65)] TOTAL THIS MO. 70 DPTR FM NORMAL -22 TOTAL FM JAN 1 1022 DPTR FM NORMAL 190	[PRESSURE DATA] HIGHEST SLP 30.40 ON 16 LOWEST SLP 29.50 ON 26							

These data are preliminary and have not undergone final quality control by the National Climatic Data Center (NCDC). Therefore, these data are subject to revision. Final and certified climate data can be accessed at the NCDC - http://www.ncdc.noaa.gov.

### O Monthly/Daily Climate Data

000 CXUS55 KLOT 051706 CF60RD

PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6)

STATION:

CHICAGO-OHARE IL

MONTH: YEAR: DECEMBER

2009

												E: DE:						
-	rempe	ERATU	JRE ]	EN F	:	:	:PCPN: SNOW:			WIND			:SUNS	:PK WND				
	2	3	4	5	6A	6в	7	8				12 2MIN	13	14	15	16	17	18
Υ	MAX	MIN	AVG	DEP	HDD	CDD	WTR	SNW					MIN	PSBL	S-S	WX	SPD	DR
	55	32	44	11			0.00	0.0				220		M	2		32	200

NOTES:

# LAST OF SEVERAL OCCURRENCES

COLUMN 17 PEAK WIND IN M.P.H.

LIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6), PAGE 2

STATION: CHICAGO-OHARE IL

MONTH: DECEMBER

YEAR: 2009 LATITUDE: 41 58 N LONGITUDE: 87 54 W

EMPERATURE DATA]	[PRECIPITATION DATA]								
AVERAGE MONTHLY: 26.5 DPTR FM NORMAL: -0.9 HIGHEST: 55 ON 1 LOWEST: 0 ON 10	DPTR FM NORMAL: 0.30								
	SNOW, ICE PELLETS, HAIL TOTAL MONTH: 20.8 INCHES GRTST 24HR 5.6 ON M GRTST DEPTH: 5 ON 23								
[NO. OF DAYS WITH]	[WEATHER - DAYS WITH]								
MAX 32 OR BELOW: 17 MAX 90 OR ABOVE: 0 MIN 32 OR BELOW: 30 MIN 0 OR BELOW: 1	0.01 INCH OR MORE: 16 0.10 INCH OR MORE: 8 0.50 INCH OR MORE: 1 1.00 INCH OR MORE: 0								
[HDD (BASE 65)] TOTAL THIS MO. 1188 DPTR FM NORMAL 37 TOTAL FM JUL 1 2341 DPTR FM NORMAL -97	CLEAR (SCALE 0-3) 2 PTCLDY (SCALE 4-7) 12 CLOUDY (SCALE 8-10) 17								
[CDD (BASE 65)] TOTAL THIS MO. 0 DPTR FM NORMAL 0	[PRESSURE DATA]								

[PRESSURE DATA]
HIGHEST SLP 30.60 ON 16
LOWEST SLP 28.91 ON 9

SYMBOLS USED IN COLUMN 16

1 = FOG OR MIST 2 = FOG REDUCING VISIBILITY TO 1/4 MILE OR LESS

3 = THUNDER

4 = ICE PELLETS

5 = HAIL

6 = FREEZING RAIN OR DRIZZLE 7 = DUSTSTORM OR SANDSTORM: VSBY 1/2 MILE OR LESS

8 = SMOKE OR HAZE

9 = BLOWING SNOW

X = TORNADO

EMARKS] #FINAL-12-09#

DPIK FM NORMAL 0 TOTAL FM JAN 1 589 DPTR FM NORMAL -241

These data are preliminary and have not undergone final quality control by the National Climatic Data Center (NCDC). Therefore, these data are subject to revision. Final and certified climate data can be accessed at the NCDC - http://www.ncdc.noaa.gov.

# ) Monthly/Daily Climate Data

000

CXUS55 KLOT 010700

CF6ORD

PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6)

STATION:

CHICAGO-OHARE IL

MONTH:

NOVEMBER

YEAR:

2009

LATITUDE: 41 58 N LONGITUDE: 87 54 W

-	ГЕМРЕ	RATU	JRE I	IN F		:	PCPN:		SNOW:	WIND :SUNSHINE: SKY			:PK \	:PK WND				
1.	2	3	4	5	6А	6в	7	8	9 12z	10 AVG	11 MX	12 2мти	13	14	15	16	17	18
DY	MAX	MIN	AVG	DEP	HDD	CDD	WTR	SNW	DPTH				MIN	PSBL	S-S	WX	SPD	DR ====
1 2 3 4 5 6 7 8 9 10 1 14 15 16 17 18 19 20 21 22 23 24 25 6 27 8 29 30 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	52 52 547 555 62 770 635 554 555 635 547 47 47 47 49 40 544 41	30 424 33 445 45 33 444 443 443 447 33 440 33 440 33 440 33 440 33 440 33 440 33 440 33 440 33 440 33 440 33 440 33 440 33 440 33 440 33 440 33 440 33 440 33 440 33 440 340 3	411 446 445 445 445 446 446 446 446 446 446	-46421561554143877776117999831853	20 21 17 21 19 20 20 22 27 30		0.00 0.01 0.00 0.00 0.00 0.00 0.00 0.00	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	6.8 7.8 14.4 10.6 8.8 8.6 11.0 16.1 7.3 6.1 6.1 7.1 10.6	4 21 3 16 3 18 4 25 4 25 5 24 6 25 6 25 7 15 7 15 8 15	320 310 310 320 170 200 210 40 50 90 160 200 180 60 50 220 270 130 240 240 240 240 330 330 330	M M M M M M M M M M M M M M M M M M M	M M M M M M M M M M M M M M M M M M M	654918139735760100109724991004295	1 1 18 18 18 1 1	15 25 20 24 29 32 32 28 29 31 24 20 24 18 30 33 35 20 17 18 15 18 25 23 24 25 32	320 190 210 30 60 60 150 200 340 60 250 60 270 80 60 240 260 310 330 220 360
SM					583	0	1.23			260.			M		194			
AV	53.1	37	.6						C			STST 170		М	6		MAX(MP 35 6	н) 0

NOTES:

# LAST OF SEVERAL OCCURRENCES

COLUMN 17 PEAK WIND IN M.P.H.

ELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6) , PAGE 2

STATION: CHICAGO-OHARE IL

MONTH:

NOVEMBER

YEAR:

2009

41 58 N LATITUDE: LONGITUDE: 87 54 W

#### [PRECIPITATION DATA] TTEMPERATURE DATA ZERAGE MONTHLY: 45.3 TOTAL FOR MONTH: 1.23 DPTR FM NORMAL: 6.0 HIGHEST: 71 ON 7 DPTR FM NORMAL: -1.78GRTST 24HR 0.67 ON 24-25 28 ON 12 LOWEST: SNOW, ICE PELLETS, HAIL TOTAL MONTH: T T ON 26-26 GRTST 24HR 0 GRTST DEPTH: [NO. OF DAYS WITH] [WEATHER - DAYS WITH] MAX 32 OR BELOW: 0 0.01 INCH OR MORE: MAX 90 OR ABOVE: 0.10 INCH OR MORE: 4 0 0.50 INCH OR MORE: MIN 32 OR BELOW: 5 1 MIN 0 OR BELOW: 1.00 INCH OR MORE: [HDD (BASE 65) ] CLEAR (SCALE 0-3) 6 PTCLDY (SCALE 4-7) 12 CLOUDY (SCALE 8-10) 12 TOTAL THIS MO. 583 DPTR FM NORMAL -1761153 TOTAL FM JUL 1 -134 DPTR FM NORMAL [CDD (BASE 65) ] 0 TOTAL THIS MO.

SYMBOLS USED IN COLUMN 16

1 = FOG OR MIST

2 = FOG REDUCING VISIBILITY TO 1/4 MILE OR LESS

3 = THUNDER

4 = ICE PELLETS

5 = HAIL

6 = FREEZING RAIN OR DRIZZLE 7 = DUSTSTORM OR SANDSTORM:

VSBY 1/2 MILE OR LESS 8 = SMOKE OR HAZE

9 = BLOWING SNOW

X = TORNADO

DPTR FM NORMAL 0 589 TOTAL FM JAN 1 DPTR FM NORMAL -241

[PRESSURE DATA] HIGHEST SLP M ON M

LOWEST SLP 29.70 ON 25

[PEMARKS] INAL- $1\bar{1}$ -09#

These data are preliminary and have not undergone final quality control by the National Climatic Data Center (NCDC). Therefore, these data are subject to revision. Final and certified climate data can be accessed at the NCDC - http://www.ncdc.noaa.gov.

### O Monthly/Daily Climate Data

000 CXUS55 KLOT 010700 CF60RD

PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6)

STATION:

CHICAGO-OHARE IL

MONTH:

OCTOBER

YEAR:

2009

LATITUDE: 41 58 N LONGITUDE: 87 54 W

	ГЕМРЕ	RATU	JRE ]	IN F	:	:	PCPN:	:	SNOW:	WIND :SUNSHINE: SKY				:PK WND				
1	2	3	4	5	6А	6в	7	8	9 12Z	10 AVG	11 MY	12 2MIN	13	14	15	16		18
DY	MAX	MIN	AVG	DEP	HDD	CDD	WTR	SNW	DPTH				MIN	PSBL	S-S	WX	SPI	DR
1 2 3 4 4 5 6 7 8 9 10 1 14 15 16 17 18 19 20 1 22 23 24 25 26 27 28 29 30 31 == SM	59 56 57 60 61 53 52 48 44 45 53 56 56 57 60 67 46 17	417 47 45 49 45 49 45 41 33 44 45 46 47 46 35 47 46 35 47 46 37 47 47 47 47 47 47 47 47 47 47 47 47 47	50 52 53 53 53 53 53 44 44 42 55 56 54 54 57 41 51 51 51 51 51 51 51 51 51 51 51 51 51	-8 -6 -4 -1 -1 -1 -10 -10 -10 -10 -10 -10 -10 -1	17 11 11 8 24 ====		0.89 0.21 0.11 0.00 0.03 0.00 0.12 0.46 0.00 0.02 0.03 0.29 0.04 0.00 0.03 1.03 0.89 0.04 0.27 0.11 0.06 0.00 0.60 0.81		0 0 T	6. 4. 12. 17. 11. 287.	18 18 18 18 18 18 18 18 18 18	130 280 280 100 270 290 160 340 270 330 50 100 100 210 220 210 220 250 250 300 60 120	M M M M M M	M M M M M M M M M M M M M M M M M M M	7 9 6 3 8 10 7 10 10 10 10 10 10 10 10 10 10 247	13 18 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	28 22 23 41 33 18 29 22 28 21 22 21 21 31 41 31 41 31	250 280 280 290 270 260 300 3230 3230 40 210 30 40 30 40 30 40 30 40 30 40 30 40 30 40 40 40 40 40 40 40 40 40 40 40 40 40
== AV	55.2	42	-=== . 5	====	====	====	=======			9.		==== STST 270		) M	8	#	MAX(M 47 2	===== PH) 60

NOTES:

# LAST OF SEVERAL OCCURRENCES

COLUMN 17 PEAK WIND IN M.P.H.

ELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6), PAGE 2

STATION: CHICAGO-OHARE IL

OCTOBER MONTH:

YEAR: 2009 LATITUDE: 41 58 N LONGITUDE: 87 54 W

EMPERATURE DATA											
AVERAGE	MONTHLY:	48.8									

**HIGHEST:** 

LOWEST:

DPTR FM NORMAL: -3.3

69 ON 21

29 ON 11

#### [PRECIPITATION DATA]

6.04 TOTAL FOR MONTH: DPTR FM NORMAL: 3.33 GRTST 24HR 1.78 ON 22-23

SNOW, ICE PELLETS, HAIL

TOTAL MONTH: T GRTST 24HR T ON 16-16

GRTST DEPTH: 0

[WEATHER - DAYS WITH]

## [NO. OF DAYS WITH]

MAX 32 OR BELOW: 0 0.01 INCH OR MORE: 1 MAX 90 OR ABOVE: 0 0.10 INCH OR MORE: 1 MIN 32 OR BELOW: 3 0.50 INCH OR MORE: MIN 0 OR BELOW: 0 1.00 INCH OR MORE:
--

[HDD (BASE 65)]
TOTAL THIS MO. 493 DPTR FM NORMAL. 92 570

TOTAL FM JUL 1 DPTR FM NORMAL 42

[CDD (BASE 65) ] 0 TOTAL THIS MO. -10 DPTR FM NORMAL 589 TOTAL FM JAN 1 DPTR FM NORMAL -241

[PRESSURE DATA] HIGHEST SLP M ON M LOWEST SLP 29.34 ON 23

CLEAR (SCALE 0-3) 1 PTCLDY (SCALE 4-7) 13 CLOUDY (SCALE 8-10) 17

- EMARKS " - INAL - 10-09#

#### SYMBOLS USED IN COLUMN 16

1 = FOG OR MIST

2 = FOG REDUCING VISIBILITY TO 1/4 MILE OR LESS

3 = THUNDER

4 = ICE PELLETS

5 = HAIL

6 = FREEZING RAIN OR DRIZZLE 7 = DUSTSTORM OR SANDSTORM: VSBY 1/2 MILE OR LESS 8 = SMOKE OR HAZE

9 = BLOWING SNOW

X = TORNADO

These data are preliminary and have not undergone final quality control by the National Climatic Data Center (NCDC). Therefore, these data are subject to revision. Final and certified climate data can be accessed at the NCDC - http://www.ncdc.noaa.gov.

# o Monthly/Daily Climate Data

000 CXUS55 KLOT 011229 CF60RD

PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6)

STATION:

CHICAGO-OHARE IL

MONTH:

**SEPTEMBER** 

YEAR:

2009

LATITUDE:

41 58 N 87 54 W LONGITUDE:

TEMPERATURE IN F:						:	PCPN:		SNOW:	WIN	ID		: SUNS	SHINE	: SK	Y	:PK	WND
1	2	3	4	5	6A	6в	7	8	9 12z	10 AVG	11 MX	 12 2мты	13	14	1.5	16	17	18
DY	MAX	MIN	AVG	DEP	HDD	CDD	WTR	SNW					MIN	PSBL	S-S	WX	SPD	DR ====
1 2 3 4 5 6 7 8 9 10 1 14 15 16 17 18 19 20 21 22 32 44 25 62 7 28 9 30 = M	72 73 75 78 77 78 80 79 80 84 82 71 72 76 73 77 76 73 70 62 60 62	470564 556654 5586555 555566655 5566655 487 = 160	60 66 66 66 66 66 67 77 66 67 73 66 66 66 66 66 66 66 66 66 66 66 66 66	-86-23 -21367644691223226884223554 4=================================	1 0 0 0 3 3	0101434786446800010034400000	0.75 T 0.00 0.00 0.16 0.00 0.08 0.01 0.00	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	5.1 6.2 7.8 11.4 5.3 14.4 7.4 10.7 10.7 10.7	133 14 15 16 16 16 16 16 16 16 16 16 16 16 16 16	60 90 30 70 90 50 30 40 50 100 60 200 120 310 320 280	M M M M M M M M M M M M M M M M M M M	M M M M M M M M M M M M M M M M M M M	111178366315346333687890985893 15346333687890985893 155	18 18 1	24 24 24 26 26 26 26 26 27 27 27 27 27 27 27 27 27 27 27 27 27	60 70 60 60 70 50 210 1 M 1 M 80 50 50 40 40 40 40 40 40 40 40 40 4
==:		====	====				T.03	====	=====		====	==== STST	==== M	===== M	====	====	===== MAX(MF	====
ΑV	74.3	) )b	. 4					MIS	c			280	V	IVI			40 31	

# LAST OF SEVERAL OCCURRENCES

COLUMN 17 PEAK WIND IN M.P.H.

PELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6) , PAGE 2

CHICAGO-OHARE IL STATION:

MONTH: SEPTEMBER

2009 YEAR:

LATITUDE: 41 58 N LONGITUDE: 87 54 W

#### SYMBOLS USED IN COLUMN 16 [PRECIPITATION DATA] "TEMPERATURE DATA" TOTAL FOR MONTH: 1.03 1 = FOG OR MIST..verage monthly: 65.3 2 = FOG REDUCING VISIBILITY DPTR FM NORMAL: 1.5 DPTR FM NORMAL: -2.24 GRTST 24HR 0.75 ON 20-20 TO 1/4 MILE OR LESS 84 ON 14 HIGHEST: 3 = THUNDERLOWEST: 47 ON 30. 1 SNOW, ICE PELLETS, HAIL 4 = ICE PELLETS TOTAL MONTH: 0.0 INCH GRTST 24HR 0.0 GRTST DEPTH: 0 5 = HAIL6 = FREEZING RAIN OR DRIZZLE 7 = DUSTSTORM OR SANDSTORM: VSBY 1/2 MILE OR LESS 8 = SMOKE OR HAZE[NO. OF DAYS WITH] [WEATHER - DAYS WITH] 9 = BLOWING SNOWX = TORNADOMAX 32 OR BELOW: 0 0.01 INCH OR MORE: 2 0.10 INCH OR MORE: MAX 90 OR ABOVE: 0 0.50 INCH OR MORE: MIN 32 OR BELOW: 0 0 MIN 0 OR BELOW: 0 1.00 INCH OR MORE: [HDD (BASE 65) ] 50 CLEAR (SCALE 0-3) TOTAL THIS MO. PTCLDY (SCALE 4-7) 15 DPTR FM NORMAL -62 CLOUDY (SCALE 8-10) 6 TOTAL FM JUL 1 77 -50DPTR FM NORMAL [CDD (BASE 65) ] TOTAL THIS MO. 68 [PRESSURE DATA] ~23 DPTR FM NORMAL HIGHEST SLP 30.36 ON 1 589 TOTAL FM JAN 1 DPTR FM NORMAL -231 LOWEST SLP 29.35 ON 27 "EMARKS פר" INAL-09-09#

These data are preliminary and have not undergone final quality control by the National Climatic Data Center (NCDC). Therefore, these data are subject to revision. Final and certified climate data can be accessed at the NCDC - http://www.ncdc.noaa.gov.

### ) Monthly/Daily Climate Data

000 CXUS55 KLOT 010700 CF60RD

PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6)

STATION: CHICAGO-OHARE IL

MONTH: AUGUST
YEAR: 2009
LATITUDE: 41 58 N
LONGITUDE: 87 54 W

NOTES:

# LAST OF SEVERAL OCCURRENCES

COLUMN 17 PEAK WIND IN M.P.H.

ELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6) , PAGE 2

STATION: CHICAGO-OHARE IL

MONTH: AUGUST

YEAR: 2009 LATITUDE: 41 58 N LONGITUDE: 87 54 W

EMPERATURE DATA]
AVERAGE MONTHLY: 70.5 DPTR FM NORMAL: -1.2 HIGHEST: 91 ON 9 LOWEST: 49 ON 31

# [PRECIPITATION DATA]

4.26 TOTAL FOR MONTH: DPTR FM NORMAL: -0.36 GRTST 24HR 1.25 ON 26-27

SNOW, ICE PELLETS, HAIL TOTAL MONTH: 0.0 INCH GRTST 24HR 0.0 GRTST DEPTH:

# [WEATHER - DAYS WITH]

#### [NO. OF DAYS WITH] MAX 32 OR BELOW: MAX 90 OR ABOVE: MIN 32 OR BELOW: $0.01\ \text{INCH}$ OR MORE: $0.10\ \text{INCH}$ OR MORE: 13 9 1 0.50 INCH OR MORE: 3 0 MIN O OR BELOW: 0 1.00 INCH OR MORE: 0

[HDD (BASE 65)] TOTAL THIS MO. DPTR FM NORMAL	18 9	CLEAR PTCLDY		6 20
TOTAL FM JUL 1 DPTR FM NORMAL	27 12	CLOUDY		5

TOTAL FM JUL I DPTR FM NORMAL	27 12	CLOUDY (SCALE 8-10) 5	
[CDD (BASE 65) TOTAL THIS MO. DPTR FM NORMAL TOTAL FM JAN 1 DPTR FM NORMAL	194 -39 521	[PRESSURE DATA] HIGHEST SLP M ON M LOWEST SLP 29.59 ON 20	

EMARKS] #FINAL-08-09# SYMBOLS USED IN COLUMN 16

1 = FOG OR MIST

2 = FOG REDUCING VISIBILITY TO 1/4 MILE OR LESS

3 = THUNDER4 = ICE PELLETS

5 = HAIL

6 = FREEZING RAIN OR DRIZZLE 7 = DUSTSTORM OR SANDSTORM: VSBY 1/2 MILE OR LESS

8 = SMOKE OR HAZE9 = BLOWING SNOWX = TORNADO

These data are preliminary and have not undergone final quality control by the National Climatic Data Center (NCDC). Therefore, these data are subject to revision. Final and certified climate data can be accessed at the NCDC - http://www.ncdc.noaa.gov.

### no Monthly/Daily Climate Data

000 CXUS55 KLOT 010700 CF60RD

PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6)

STATION: CHICAGO-OHARE IL

MONTH: JULY
YEAR: 2009
LATITUDE: 41 58 N
LONGITUDE: 87 54 W

TEMPERATURE IN F:							PCPN:	:PCPN: SNOW:			ND		:SUNSHINE: SKY				:PK	:PK WND		
1	2	3	4	5	6A	6в	7	8	9 12Z	10 AVG	11 MX	12 2MTN	13	14	15	16	17	18		
DY	MAX	MIN	AVG	DEP	HDD	CDD	WTR	SNW	DPTH				MIN	PSBL	S-S	WX ====	SPD	DR		
1 2 3 4 5 6 7 8 9 100 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	65 73 79 81 86 77 82 85 82 79 85 87 72 71 80 83 84 84 81 81	579397691933865554555556666666558 655566555555556666666558	66 71 64 69 78 63 70 65 70 65 71 72 74 75 70 70 70 71 71 72	-11 -6 -1 -8 -3 -10 -4 -10 -3 -3 -10 -10 -3 -3 -10 -10 -10 -10 -10 -10 -10 -10	0 ====	48304895531070001467798910745	0.00 0.20 0.05 0.00 0.06 0.00 0.08 0.25 0.00	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0 0 0 0 0 0	5.6 5.6 9.6 11. 8.6 7. 5. 7.	3 15 3 17 3 17 9 14 1 17 1 18 1 17 1 18 1 18	320 90 50 110 290 350 70 140 260 310 320 70 100 20 360 190 270 310 200 210 340 330	M M	M M M M M M M M M M M M M M M M M M M		1 1 18 1 138 8 13 18 138 38	43 29 22 48 44 22 28	60 50 320 60 60 130 240 280 30 70 150 270 240 310 60 60 100 190 270 320 210 220		
==	2431 =====	===	====	====	9 ====	150 ====	1.53 =====		0.0 =====		<b>===</b>	STST		===== M		====	MAX(MF	ы) =====		
ΑV	78.4	+ 60	. 4				·	MIS	C			200		V  ========			48 21			

NOTES:

# LAST OF SEVERAL OCCURRENCES

COLUMN 17 PEAK WIND IN M.P.H.

LELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6), PAGE 2

STATION: CHICAGO-OHARE IL

MONTH: JULY

Untitled
YEAR: 2009
LATITUDE: 41 58 N
LONGITUDE: 87 54 W

EMPERATURE DATA]	[PRECIPITATION DATA]	SYMBOLS USED IN COLUMN 16
DPTR FM NORMAL: -3.9	SNOW, ICE PELLETS, HAIL TOTAL MONTH: 0.0 INCH	2 = FOG REDUCING VISIBILITY TO 1/4 MILE OR LESS 3 = THUNDER
[NO. OF DAYS WITH]	[WEATHER - DAYS WITH]	9 = BLOWING SNOW X = TORNADO
MAX 32 OR BELOW: 0 MAX 90 OR ABOVE: 0 MIN 32 OR BELOW: 0 MIN 0 OR BELOW: 0	0.01 INCH OR MORE: 10 0.10 INCH OR MORE: 4 0.50 INCH OR MORE: 1 1.00 INCH OR MORE: 0	
[HDD (BASE 65)] TOTAL THIS MO. 9 DPTR FM NORMAL 3 TOTAL FM JUL 1 9 DPTR FM NORMAL 3	CLEAR (SCALE 0-3) 1 PTCLDY (SCALE 4-7) 24 CLOUDY (SCALE 8-10) 6	
[CDD (BASE 65) ] TOTAL THIS MO. 150 DPTR FM NORMAL -129 TOTAL FM JAN 1 327 DPTR FM NORMAL -169		

EMARKS]

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# o Monthly/Daily Climate Data

000 CXUS55 KLOT 010700 CF60RD

PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6)

STATION:

CHICAGO-OHARE IL

MONTH: YEAR:

JUNE 2009

41 58 N 54 W

LAITIUDE:	41
LONGITUDE:	87

	ГЕМРЕ	RATU	JRE 1	N F	:	:	PCPN:	Ç	SNOW:	WIN	ID		: SUNS	SHINE	SKY	<b>′</b>	:PK V	NND
1	2	3	4	5	6A	6в	7	8	9 12z	10 AVG	11	12 2MTN	13	14	15	16	17	18
DY	MAX	MIN	AVG	DEP	HDD	CDD	WTR	SNW	DPTH				MIN	PSBL	S-S	WX	SPD	DR ====
1 2 3 4 4 5 6 7 8 9 10 11 1 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 ===================================	78 661 68 763 78 67 67 67 67 88 77 88 88 77 68 88 77 66	51843244155255543945139165806639 = 3	65455555555555555555555555555555555555	113-130 -130-30 -60-8-57 -41-43 -19-31 -9-31 -41-9-31 -9-31	0 11 13 10 3 8 2 0 4 4 6 3 4 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 1 1 3 1 2 1 4 1 1 1 1 1 0 0 0 1 1 1 0 0 1 0 1 0 1	0.44 0.12 0.00 0.00 0.00 0.02 0.04 0.45 0.01 0.01 0.33 0.00 0.00 1.23 0.00 0.12 3.97 0.00 0.01 0.09 0.00 0.04 0.05	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0		11. 2 8. 7 10. 7 6. 7 6. 8 10. 8 11. 8 11. 8 12. 9 12. 9	18	240 320 80 90 100 60 50 60 230 300	M M M M M M M	M M M M M M M M M M M M M M M M M M M	896338980856099059556637148 10896856099059556637148	13 1 1 13 12 18 1 18 13 13 13 3	36 28 31 25 23 26 31 35 22 25 29 24 24 28 30 21 43 26 20 23 18 51 22 26 29 40 31 18	310 60 40 60 250 50 240 80 40 40 70 100 40 180 250 300 60 70 70 60 250 310 320 330 330
SM ==	=====		====			157 ====	7.18 =====	====	0.0	====	====	====	M ====		203 === <u>=</u>	====	======	======
AV	77.0	58	. 1					MIS	C		8 FA # 38	STST 60		M 	7		MAX(MP 51 6	

NOTES:

# LAST OF SEVERAL OCCURRENCES

COLUMN 17 PEAK WIND IN M.P.H.

'ELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6) , PAGE 2

STATION: CHICAGO-OHARE IL

MONTH: YEAR:

JUNE 2009

Untitled LATITUDE: 41 58 N LONGITUDE: 87 54 W

[TEMPERATURE DATA]	[PRECIPITATION DATA]	SYMBOLS USED IN COLUMN 16
DPTR FM NORMAL: -0.6	SNOW, ICE PELLETS, HAIL TOTAL MONTH: 0.0 INCH	
[NO. OF DAYS WITH]	[WEATHER - DAYS WITH]	9 = BLOWING SNOW X = TORNADO
	0.01 INCH OR MORE: 15 0.10 INCH OR MORE: 8 0.50 INCH OR MORE: 2 1.00 INCH OR MORE: 2	
[HDD (BASE 65) ] TOTAL THIS MO. 71 DPTR FM NORMAL 22 TOTAL FM JUL 1 6596 DPTR FM NORMAL 98	PTCLDY (SCALE 4-7) 14	
[CDD (BASE 65)] TOTAL THIS MO. 157 DPTR FM NORMAL -2 TOTAL FM JAN 1 177 DPTR FM NORMAL -40	[PRESSURE DATA] HIGHEST SLP M ON M LOWEST SLP 29.54 ON 19	

These data are preliminary and have not undergone final quality control by the National Climatic Data Center (NCDC). Therefore, these data are subject to revision. Final and certified climate data can be accessed at the NCDC - http://www.ncdc.noaa.gov.

### ) Monthly/Daily Climate Data

000 CXUS55 KLOT 010700 CF60RD

PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6)

STATION: CHICAGO-OHARE IL

MONTH: OCTOBER
YEAR: 2008
LATITUDE: 41 58 N
LONGITUDE: 87 54 W

-	TEMPERATURE IN F:				;	PCPN:		SNOW:	WIN	ND		SUNS	SHINE	: SK	<b>′</b>	:PK	WND	
1	2	3	4	5	6A	6в	7	8	9 12Z	10	11 MY	12 2MIN	13	14	15	10	5 17	18
DY	MAX	MIN	AVG	DEP	HDD	CDD	WTR	SNW	DPTH				MIN	PSBL	S-S	WX	SPI	DR
1234567890 13415671890122345222331 = SM	61 61 61 61 61 61 61 61 61 61 61 61 61 6	46 44 44 34 44 44 44 44 44 44 44 44 44 44	542550555555555555555555555555555555555	-4-6-5-7-6-6-4-2-3-2-117-16-8-2-1-2-10-18-9-5-13-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-	11 13 13 15 14 35 87 80 00 40 10 11 11 11 11 11 11 11 11 11 11 11 11	000000006400000000000000000000000000000	0.00 0.00 0.01 0.00 0.06 0.00 0.00 0.00	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0 0 0 0 0 0	9.2 7.4 6.6 10.7 11.8 5.6 5.6 7.7 6.7 7.8 13.1 14.7 10.6	2 18 7 15 7 15 1 14 5 16 7 20 1 17 1 16 1 17 1 16 1 16 1 17 1 16 1 17 1 18 1 18 1 18 1 18 1 18 1 18 1 18	110 120 120 280 320 120 180 170 220 330 340 190 360 110 2210 2210 270 320 350 190	M M M M M M M M M M M M M M M M M M M	M M M M M M M M M M M M M M M M M M M	5672689611478803865747777674201 ==169	18 5	2! 2! 2! 2! 2! 2! 2! 2! 2! 2! 2! 2! 2! 2	290 70 70 90 100 110 290 290 200 200 200 200 200 20
==	==== 61.	====	=====	====			=====	====		8.8	==== 8 FA	==== STST	==== M	==== M	==== 5		MAX(M	==== PH)
==				====				MIS ====	C	-> :	# 37 ====	270				# ====	47 2	70

NOTES:

# LAST OF SEVERAL OCCURRENCES

COLUMN 17 PEAK WIND IN M.P.H.

ELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6) , PAGE 2

STATION: CHICAGO-OHARE IL

MONTH: OCTOBER

Untitled YEAR: 2008 LATITUDE: 41 58 N LONGITUDE: 87 54 W

EMPERATURE DATA]	[PRECIPITATION DATA]	SYMBOLS USED IN COLUMN 16
AVERAGE MONTHLY: 52.6 DPTR FM NORMAL: 0.5 HIGHEST: 84 ON 12 LOWEST: 31 ON 30,28	TOTAL FOR MONTH: 2.07 DPTR FM NORMAL: -0.64 GRTST 24HR 0.99 ON 7-8  SNOW, ICE PELLETS, HAIL TOTAL MONTH: T GRTST 24HR T ON 27-27 GRTST DEPTH: 0	1 = FOG OR MIST 2 = FOG REDUCING VISIBILITY TO 1/4 MILE OR LESS 3 = THUNDER 4 = ICE PELLETS 5 = HAIL 6 = FREEZING RAIN OR DRIZZLE 7 = DUSTSTORM OR SANDSTORM: VSBY 1/2 MILE OR LESS 8 = SMOKE OR HAZE
[NO. OF DAYS WITH]	[WEATHER - DAYS WITH]	9 = BLOWING SNOW X = TORNADO
MAX 32 OR BELOW: 0 MAX 90 OR ABOVE: 0 MIN 32 OR BELOW: 3 MIN 0 OR BELOW: 0	0.01 INCH OR MORE: 9 0.10 INCH OR MORE: 6 0.50 INCH OR MORE: 1 1.00 INCH OR MORE: 0	A TOMMES
[HDD (BASE 65) ] TOTAL THIS MO. 387 DPTR FM NORMAL -14 TOTAL FM JUL 1 440 DPTR FM NORMAL -88	CLEAR (SCALE 0-3) 7 PTCLDY (SCALE 4-7) 20 CLOUDY (SCALE 8-10) 4	
[CDD (BASE 65) ] TOTAL THIS MO. 10 DPTR FM NORMAL 0 TOTAL FM JAN 1 828 DPTR FM NORMAL -2	[PRESSURE DATA] HIGHEST SLP M ON M LOWEST SLP 29.49 ON 30	
.EMARKS] #FINAL-10-08#		

These data are preliminary and have not undergone final quality control by the National Climatic Data Center (NCDC). Therefore, these data are subject to revision. Final and certified climate data can be accessed at the NCDC - http://www.ncdc.noaa.gov.

### O Monthly/Daily Climate Data

000 CXUS55 KLOT 131944 CF6ORD

PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6)

STATION: CHICAGO-OHARE IL

MONTH: APRIL
YEAR: 2009
LATITUDE: 41 58 N
LONGITUDE: 87 54 W

			:PK WND
	======================================	13 14 15 16	17 18
		MIN PSBL S-S WX	SPD DR
2       50       37       44       1       21       0       0.14       0.0       0       1         3       50       37       44       1       21       0       0.04       0.0       0       1         4       50       31       41       -3       24       0       0.00       0.0       0         5       43       33       38       -6       27       0       0.51       2.1       0       1         6       40       32       36       -8       29       0       T       T       1       1       7       49       29       39       -6       26       0       0.00       0.0       0 <td< td=""><td>15.9 30 240 10.7 23 360 13.2 25 350 7.9 17 90 18.2 28 10 11.2 25 360 12.7 25 310 8.5 16 270 5.9 14 40 17.3 28 40 9.6 18 20 9.1 16 40 14.2 25 70 11.9 23 20 9.3 20 40 4.6 13 40 3.6 14 90 3.4 13 290 7.3 13 30 13.4 24 280 10.8 23 310 12.6 25 170 15.2 33 180 17.1 30 220 10.7 28 200 15.3 24 40 8.9 13 110 7.8 18 310 7.8 18 310 7.8 18 310 7.8 18 310</td><td>M M 10 1 M M 10 1 M M 5 M M 0 M M 1 M M 7 M M 10 18 M M 9 1 M M 7 1 M M 3 M M 6 13 M M 5 138 M M 10 13 M M 9 1 M M 9 1 M M 9 1 M M 9 1 M M 8 1</td><td>40 220 31 20 32 350 28 80 39 40 32 10 43 300 22 260 28 50 35 50 33 50 29 40 38 60 32 30 26 50 29 40 25 70 20 60 23 40 31 280 33 50 32 170 43 180 39 230 35 190 47 210 33 50 28 70 22 310</td></td<>	15.9 30 240 10.7 23 360 13.2 25 350 7.9 17 90 18.2 28 10 11.2 25 360 12.7 25 310 8.5 16 270 5.9 14 40 17.3 28 40 9.6 18 20 9.1 16 40 14.2 25 70 11.9 23 20 9.3 20 40 4.6 13 40 3.6 14 90 3.4 13 290 7.3 13 30 13.4 24 280 10.8 23 310 12.6 25 170 15.2 33 180 17.1 30 220 10.7 28 200 15.3 24 40 8.9 13 110 7.8 18 310 7.8 18 310 7.8 18 310 7.8 18 310	M M 10 1 M M 10 1 M M 5 M M 0 M M 1 M M 7 M M 10 18 M M 9 1 M M 7 1 M M 3 M M 6 13 M M 5 138 M M 10 13 M M 9 1 M M 9 1 M M 9 1 M M 9 1 M M 8 1	40 220 31 20 32 350 28 80 39 40 32 10 43 300 22 260 28 50 35 50 33 50 29 40 38 60 32 30 26 50 29 40 25 70 20 60 23 40 31 280 33 50 32 170 43 180 39 230 35 190 47 210 33 50 28 70 22 310
AV 57.0 37.5 MISC>	11.2 FASTST > # 35 200	======================================	====== MAX(MPH) 47 210

NOTES:

# LAST OF SEVERAL OCCURRENCES

COLUMN 17 PEAK WIND IN M.P.H.

PELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6), PAGE 2

STATION: CHICAGO-OHARE IL

MONTH: APRIL YEAR: 2009

41 58 N LATITUDE: LONGITUDE: 87 54 W

#### TEMPERATURE DATA

#### [PRECIPITATION DATA]

#### SYMBOLS USED IN COLUMN 16

ÆRAGE	MON	THLY	: 4	7.2
DPTR FM	1 NORI	MAL:	-	0.5
HIGHEST	-:	84	ON	24
LOWEST:		27	ON	12

[NO. OF DAYS WITH]

TOTAL FOR MONTH: 5.19 DPTR FM NORMAL: 1.51 GRTST 24HR 1.35 ON 25-26

SNOW, ICE PELLETS, HAIL TOTAL MONTH: 2.1 INCHES GRTST 24HR 2.1 ON M GRTST DEPTH: 1 ON 6

[WEATHER - DAYS WITH]

 	 BELOW: ABOVE:	0 0	 	 MORE:	
 	 BELOW: BELOW:	8 0	 	 MORE:	6 0

[HDD (BASE 65)] TOTAL THIS MO. CLEAR (SCALE 0-3) 5 PTCLDY (SCALE 4-7) 12 CLOUDY (SCALE 8-10) 13 526 DPTR FM NORMAL 13 6354 TOTAL FM JUL 1 137 DPTR FM NORMAL

-8

[CDD (BASE 65) ] -7 TOTAL THIS MO. DPTR FM NORMAL TOTAL FM JAN 1

[PRESSURE DATA] HIGHEST SLP 30.45 ON 16 LOWEST SLP 29.46 ON 3

「REMARKS] INAL-04-09#

DPTR FM NORMAL

1 = FOG OR MIST

2 = FOG REDUCING VISIBILITY TO 1/4 MILE OR LESS

3 = THUNDER

4 = ICE PELLETS

5 = HAIL

6 = FREEZING RAIN OR DRIZZLE 7 = DUSTSTORM OR SANDSTORM:VSBY 1/2 MILE OR LESS

8 = SMOKE OR HAZE9 = BLOWING SNOW

X = TORNADO

These data are preliminary and have not undergone final quality control by the National Climatic Data Center (NCDC). Therefore, these data are subject to revision. Final and certified climate data can be accessed at the NCDC - http://www.ncdc.noaa.gov.

# O Monthly/Daily Climate Data

000 CXUS55 KLOT 131942 CF60RD

PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6)

STATION: CHICAGO-OHARE IL

MONTH: MARCH YEAR: 2009 LATITUDE: 41 58 N LONGITUDE: 87 54 W

7	TEMPERATURE IN F:				:	:PCPN: SNOW: WIN			WIND :SUNSHINE: SKY				<i>(</i>	:PK WND				
1	2	3	4	5	6а	6в	7	8	9 12z	10	11	12 2MIN	13	14	15	16	17	18
DY ===	MAX	MIN	AVG	DEP	HDD	CDD	WTR	SNW	DPTH				MIN	PSBL	S-S	WX	SPD	DR ====
123456789011 1415617892122342562728931	22 22 30 44 65 55 44 44 61 52 65 54 44 45 53 44 45 53	14 16 16 16 16 16 16 16 16 16 16 16 16 16	18 18 23 51 23 51 23 42 20 38 42 55 50 47 46 46 47 46 47 46 47 47 47 47 47 47 47 47 47 47 47 47 47	-14 -14 -10 2 18 18 18 12 -116 -6 15 202 -15 100 7 19 2 -3 -6 -6 3	29 29 20		0.00 0.00 0.04 0.16 0.00 T 0.00 0.47 0.95 0.00 0.44	0.25 0.00 0.00 0.00 0.00 0.00 0.00 0.00	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	6.6 10.1 18.8 9.0 11.4 8.1 17.1 6.6 3.1 17.1 18.1 10.1 18.1 10.1 18.1 19.1 19.1 19.1 19.1 19.1 19.1 19	5 18 5 13 5 18 7 32 1 23 1 23 1 23 1 23 1 23 1 23 1 23 1	50 170 170 210 350 300 140 270 270 320 240 130 120 200 100 120 200 100 120 200 100 120 200 100 1	M M M M M M M M M M M M M M M M M M M	M M M M M M M M M M M M M M M M M M M	8 7 6 9	1 18 138 123 18 1 18 1	32 29 17 24 43 28 30 26 22 45 18 18 32 32 32 31 32 32 33 33 33 33 33	20 40 160 170 200 220 360 290 270 70 120 150 210 60 120 120 220 290 360 210 250 250 250
===	1510 =====	====	47 ====		781 ====	0	5.20		2.1	====			M 		195			
AV	48.7	' 30	. 5					MIS	C		# 38	STST 180	М	М	6	# 4	IAX(MP  9 17	

NOTES:

# LAST OF SEVERAL OCCURRENCES

COLUMN 17 PEAK WIND IN M.P.H.

ELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6), PAGE 2

STATION: CHICAGO-OHARE IL

MONTH: MARCH

Untitled YEAR: 2009 LATITUDE: 41 58 N LONGITUDE: 87 54 W

EMPERATURE DATA]	[PRECIPITATION DATA]
AVERAGE MONTHLY: 39.6 DPTR FM NORMAL: 2.3 HIGHEST: 74 ON 17 LOWEST: 14 ON 12, 2	TOTAL FOR MONTH: 5.20 DPTR FM NORMAL: 2.55 GRTST 24HR 1.67 ON 8-8
17 SN 12, 2	SNOW, ICE PELLETS, HAIL TOTAL MONTH: 2.1 INCHES GRTST 24HR 1.2 ON M GRTST DEPTH: 1 ON 29
[NO. OF DAYS WITH]	[WEATHER - DAYS WITH]
MAX 32 OR BELOW: 4 MAX 90 OR ABOVE: 0 MIN 32 OR BELOW: 15 MIN 0 OR BELOW: 0	0.01 INCH OR MORE: 10 0.10 INCH OR MORE: 7 0.50 INCH OR MORE: 4 1.00 INCH OR MORE: 1
[HDD (BASE 65) ] TOTAL THIS MO. 781 DPTR FM NORMAL -77 TOTAL FM JUL 1 5828 DPTR FM NORMAL 124	CLEAR (SCALE 0-3) 3 PTCLDY (SCALE 4-7) 18 CLOUDY (SCALE 8-10) 10

0

0

-1

[PRESSURE DATA] HIGHEST SLP 30.74 ON 12 LOWEST SLP 29.34 ON 29

SYMBOLS USED IN COLUMN 16

1 = FOG OR MIST

2 = FOG REDUCING VISIBILITY TO 1/4 MILE OR LESS

3 = THUNDER

4 = ICE PELLETS

5 = HAIL

6 = FREEZING RAIN OR DRIZZLE 7 = DUSTSTORM OR SANDSTORM: VSBY 1/2 MILE OR LESS 8 = SMOKE OR HAZE

9 = BLOWING SNOW

X = TORNADO

EMARKS] -INAL-03-09#

[CDD (BASE 65) ] TOTAL THIS MO. DPTR FM NORMAL

TOTAL FM JAN 1

DPTR FM NORMAL

These data are preliminary and have not undergone final quality control by the National Climatic Data Center (NCDC). Therefore, these data are subject to revision. Final and certified climate data can be accessed at the NCDC - http://www.ncdc.noaa.gov.

# O Monthly/Daily Climate Data

000 CXUS55 KLOT 022138 CF60RD

PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6)

STATION:

MONTH:

CHICAGO-OHARE IL **FEBRUARY** 

YEAR:

2009

LATITUDE: 41 58 N LONGITUDE: 87 54 W

-	TEMPERATURE IN F:				:	:	PCPN:	9	SNOW:	: WIND :SU			:SUNS	SUNSHINE: SKY				:PK WND		
1	2	3	4	5	6A	6в	7	8	9 12Z	10	11	12 2MIN	13	14	15	16	17	18		
DY ===	MAX	MIN	AVG	DEP	HDD	CDD	WTR	SNW	DPTH				MIN	PSBL	S-S	WX	SPD	DR ====		
==	36 26 20 17 25 42 56 43 53 61 33 43 33 43 22 24 27 36 47 27	====	30 17 11 125 46 34 34 31 225 328 17 225 18 43 43 44 48	7 -6 -13 -15 -13 1 21 9 15 25 17 8 5 2 -2 -2 -11 -10 -12 -2 15 12 3 -7	35 48 54 56 40 31 25 14 22 31 40 40 47 20 22 31 41		0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.12 0.00 0.4 0.01 T 0.00 0.14 T 0.00 0.14 T 0.00 0.14 T 0.00 0.14 0.00 0.15 0.00 0.14 0.00 0.01 0.00 0.14 0.00 0	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	55 55 55 55 54 00 00 00 00 00 00 00 00 00 00 00 00 00	10.5 11.2 8.2 17.3 10.5 14.3 13.6 14.3 15.6 15.6 11.3 10.1 10.1 11.3 11.3 11.3 11.3 11.3	2 28 1 28 2 28 2 24 2 24 2 26 3 26 3 15 4 12 4 26 5 13 6 2 24 6 2 26 7 26 8 17 8 2 26 8 3 26	270 340 330 180 190 250 330 200 330 200 330 250 330 250 310 250 340 180 40 50	M M M M M M M M M M M M M M M M M M M	M M M M M M M M M M M M M M M M M M M	4 2 6 6 9 9 6 153	8 1 1 18 18 12 1 18 14 128 8 1289 8 18 138 16	28 36 25 30 27 38 21 36 44 41 37 22 18 25 16 31 36 23 23 23 23 20 35 31	180 330 330 260 290 10 170 250 190 50		
ΑV	36.5	9 19	. 6					MIS	C			STST 300	M	М	5	M. #4	4X(MP 4 23			

NOTES:

# LAST OF SEVERAL OCCURRENCES

COLUMN 17 PEAK WIND IN M.P.H.

PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6), PAGE 2

STATION: CHICAGO-OHARE IL

MONTH:

**FEBRUARY** 

YEAR:

2009

LATITUDE: 41 58 N LONGITUDE: 87 54 W

[TEMPERATURE DATA]	[PRECIPITATION DATA]	SYMBOLS USED IN COLUMN 16
^VERAGE MONTHLY: 28.2 TR FM NORMAL: 1.2 1GHEST: 61 ON 10 LOWEST: -4 ON 5		2 = FOG REDUCING VISIBILITY TO 1/4 MILE OR LESS 3 = THUNDER 4 = ICE PELLETS 5 = HAIL 6 = FREEZING RAIN OR DRIZZLE
[NO. OF DAYS WITH]	[WEATHER - DAYS WITH]	9 = BLOWING SNOW X = TORNADO
MAX 32 OR BELOW: 11 MAX 90 OR ABOVE: 0 MIN 32 OR BELOW: 24 MIN 0 OR BELOW: 2	0.01 INCH OR MORE: 9 0.10 INCH OR MORE: 5 0.50 INCH OR MORE: 2 1.00 INCH OR MORE: 1	·
[HDD (BASE 65)] TOTAL THIS MO. 1023 DPTR FM NORMAL -52 TOTAL FM JUL 1 5047 DPTR FM NORMAL 201	CLEAR (SCALE 0-3) 6 PTCLDY (SCALE 4-7) 16 CLOUDY (SCALE 8-10) 6	
[CDD (BASE 65)] TOTAL THIS MO. 0 DPTR FM NORMAL 0 TOTAL FM JAN 1 0 DPTR FM NORMAL 0	[PRESSURE DATA] HIGHEST SLP 30.65 ON 23 LOWEST SLP 29.27 ON 11	
[REMARKS] #FINAL-02-09#		

These data are preliminary and have not undergone final quality control by the National Climatic Data Center (NCDC). Therefore, these data are subject to revision. Final and certified climate data can be accessed at the NCDC - http://www.ncdc.noaa.gov.

# O Monthly/Daily Climate Data

000 CXUS55 KLOT 010853 CF60RD

PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6)

STATION: CHICAGO-OHARE IL

MONTH: **JANUARY** 2009 YEAR: LATITUDE: 41 58 N LONGITUDE: 87 54 W

Т	TEMPERATURE IN F:			:	:PCPN: SNOW:			: WIND :SUNS			UNSHINE: SKY			:PK WND				
1	2	3	4	5	6A	6в	7	8	9	10	11	12	13	14	15	16	17	18
DY I	MAX	MIN	AVG	DEP	HDD	CDD	WTR	SNW	12Z DPTH	AVG SPD			MIN	PSBL	S-S	WX	SPD	DR ====
1 2 3 4 5 6 7 8 9 10 1 14 15 16 17 18 19 20 21 22 22 22 22 23 22 23 24 25 26 27 28 29 20 20 20 20 20 20 20 20 20 20 20 20 20	31 30 36 37 29 30 29 29 29 29 29 24 -1 3 24 17 23 24 28 33 34 13 17 20 18 29 29 29 29 29 29 29 29 29 29 29 29 29	17 18 17 11 16 13 12 12 20 13 -2 -13 -18 9 11 13 14 14 17 -17 -18 -2 -17 -18 -2 -17 -18 -18 -19 -19 -19 -19 -19 -19 -19 -19 -19 -19	24 24 27 27 20 21 21 21 21 21 21 21 21 21 24 66 81 41 22 41	1 1 4 5 -2 -1 -5 -1 -15 -28 -7 -28 -28 -14 -14 -14 -14 -14 -14 -14 -14 -14 -14	47 44 41 41 59 57 51 52 43		0.00 0.00 0.01 0.10 0.00 0.04 0.02 0.27 0.35 T 0.10 T 0.16 0.00 0.00 T 0.00 0.00 0.00 0.00 0.00 0	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	6 6 6 7 7	11.7 6.0 10.1 9.8 11.7 12.1 11.7 15.0 8.1 11.0 9.1 6.1 9.1 9.1 9.1 9.1 9.1 9.1 9.1 9.1 9.1 9	257 222 267 222 268 166 207 177 213 27 17 213 27 17 213 27 17 213 28 17 29 28 18 213 29 18 213 20 19 17 20 20 18 213 20 1	290 120 300 140 280 270 110 260 160 320 280 210 320 330 340 230 340 350 360 270 300 300 300 300 300 300 300 3	M M M M M M M M M M M M M M M M M M M	M M M M M M M M M M M M M M M M M M M	9 8	12 18 18 189 189 18 1 18 18 18	21 38 21 24 22 23 16 33 25 15 16 18 22 25	320 260 210 320 340 340 240 230 330 310 10 270 200 260
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AV ===	23.	9 7	.8 ====	====	====		====	MIS	C			STST 210	M 	M :=====	6 ====	MA # 38 =====	X(MPI 29: ====	

NOTES:

# LAST OF SEVERAL OCCURRENCES

COLUMN 17 PEAK WIND IN M.P.H.

ELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6) , PAGE 2

STATION: CHICAGO-OHARE IL

**JANUARY** MONTH:

LAK: 2009 LATITUDE: 41 LONGITUDE LATITUDE: 41 58 N LONGITUDE: 87 54 W

<b>EMPERAT</b>		
-IVIDERA	1112-	114141

# [PRECIPITATION DATA]

# SYMBOLS USED IN COLUMN 16

2 = FOG REDUCING VISIBILITY

TO 1/4 MILE OR LESS

AVERA	ιGE	MONTHLY	<b>'</b> :	15.8
DPTR	FΜ	NORMAL:		-6.2
HIGHE	ST:	38	ON	31
LOWES	T:	-18	ON	16

TOTAL FOR MONTH: 1.16 -0.59 DPTR FM NORMAL: GRTST 24HR 0.46 ON 9-10

SNOW, ICE PELLETS, HAIL TOTAL MONTH: 21.5 INCHES GRTST 24HR 8.4 ON M GRTST DEPTH: 9 ON 18,17

3 = THUNDER4 = ICE PELLETS5 = HAIL

1 = FOG OR MIST

6 = FREEZING RAIN OR DRIZZLE 7 = DUSTSTORM OR SANDSTORM:VSBY 1/2 MILE OR LESS

[NO. OF DAYS WITH] [WEATHER - DAYS WITH]

0

26 0.01 INCH OR MORE: 10 0.10 INCH OR MORE: 0.50 INCH OR MORE: 5 0 0 31 1.00 INCH OR MORE: 0

8 = SMOKE OR HAZE9 = BLOWING SNOWX = TORNADO

[HDD (BASE 65) ] 1516 TOTAL THIS MO. DPTR FM NORMAL 183 4024

MAX 32 OR BELOW:

MAX 90 OR ABOVE:

MIN 32 OR BELOW:

MIN O OR BELOW:

CLEAR (SCALE 0-3) PTCLDY (SCALE 4-7) 15 CLOUDY (SCALE 8-10) 11

TOTAL FM JUL 1 DPTR FM NORMAL 253

[CDD (BASE 65) ] TOTAL THIS MO. 0 DPTR FM NORMAL 0 TOTAL FM JAN 1 0

[PRESSURE DATA] HIGHEST SLP 30.75 ON 16 LOWEST SLP 29.29 ON 7

**EMARKS**] ...-INAL-01-09#

DPTR FM NORMAL

These data are preliminary and have not undergone final quality control by the National Climatic Data Center (NCDC). Therefore, these data are subject to revision. Final and certified climate data can be accessed at the NCDC - http://www.ncdc.noaa.gov.

#### O Monthly/Daily Climate Data

000 CXUS55 KLOT 262022 CF60RD

PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6)

STATION: CHICAGO-OHARE IL

MONTH: YEAR:

DECEMBER

2008

LATITUDE: 41 58 N LONGITUDE: 87 54 W

-	TEMPERATURE IN F:				:	:	PCPN:	;	SNOW:	: WIND :SUNSHINE				SHINE	: SK\	· :	:PK WND	
1	2	3	4	5	6A	6в	7	8	9 12Z	10	11 MX 2	12	13	14	15	16	17	18
DY	MAX	MIN	AVG	DEP	HDD	CDD	WTR	SNW	DPTH				MIN	PSBL	S-S	WX	SPD	DR
1 2 3 4 4 5 6 7 8 9 10 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 30 31 = SM	61 32 43 40 24	21 21 20 12 13 16 25 17 11 19 31 56 63 22 17 64 24 24 24 21 21 24 24 24 24 24 24 24 24 24 24 24 24 24	27 28 29 17 15 23 24 25 21 24 21 21 21 21 21 21 21 21 21 21 21 21 21	-6 -4 -3 -14 -18 -18 -18 -13 -14 -13 -14 -13 -21 -21 -23 -4 -13 -21 -21 -23 -4 -13 -21 -21 -21 -21 -21 -21 -21 -21 -21 -21	63 44 45 53 27 18 37 29 33	000000000000000000000000000000000000000	0.42 T 0.09 T T 0.02 1.47 0.00 0.00 0.00 0.19 0.18 0.07 0.31 T 0.06 0.59 0.05 T 0.00 0.27 0.18 0.00 0.27 0.18 0.00 0.07 0.18 0.07 0.18 0.09 0.05 T 0.00	2.7 1.0 TT2.1 0.0 0.0 0.0 0.0 0.1 4.8 T0.3 2.4 1.4 0.0 3.8 0.4 0.0 0.0 0.0 0.0 0.0	3 4 4 6 4 7 7 6 0 0 0	13.0 13.1 10.1 17.1 7.0 12.1 6.4 7.3 12.1 16.2 11.2 10.9 13.1 17.1 14.1 12.9 10.	5 25 28 28 28 28 28 28 28 28 28 28 28 28 28	300 190 190 270 140 280 130 260 270 280 170 250 250 250 290 340	M M M M M M M M M M M M M M M M M M M	M M M M M M M M M M M M M M M M M M M	8 9 4 6 8 6 9 10 8 3 2 9 10 6 9 8 8 8 10 5 3 10 8 5 10 10 3 1 7 10 10 10 10 10 10 10 10 10 10 10 10 10	16 1468 12 18 148 1346 1 189 12468 148 12468 13 18	31 29 24 29 36 20 32 26 22 43 47 118 33 43 24	340
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ΑV	31.	<b>э</b> "14	. 4					MIS	C			250				# 47	21	

NOTES:

# LAST OF SEVERAL OCCURRENCES

COLUMN 17 PEAK WIND IN M.P.H.

ELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6) , PAGE 2

STATION: CHICAGO-OHARE IL

DECEMBER MONTH:

2008 YEAR:

LATITUDE: 41. 58 N LONGITUDE: 87 54 W

#### EMPERATURE DATA]

#### [PRECIPITATION DATA]

#### SYMBOLS USED IN COLUMN 16

AVERAGE	MONTHLY: 22.9
DPTR FM	NORMAL: -4.5
HIGHEST:	: 61 ON 27
LOWEST:	-6 ON 21

[NO. OF DAYS WITH]

MAX 32 OR BELOW: MAX 90 OR ABOVE:

MIN 32 OR BELOW:

MIN O OR BELOW:

TOTAL FOR MONTH: 5.77 3.34 DPTR FM NORMAL: GRTST 24HR 1.77 ON 26-27

SNOW, ICE PELLETS, HAIL TOTAL MONTH: 21.9 INCHES GRTST 24HR 4.8 ON M GRTST DEPTH: 7 ON 24,23

3 = THUNDER4 = ICE PELLETS 5 = HAIL

1 = FOG OR MIST

7 = DUSTSTORM OR SANDSTORM: VSBY 1/2 MILE OR LESS

[WEATHER - DAYS WITH]

0.01 INCH OR MORE: 0.10 INCH OR MORE: 9 3 0.50 INCH OR MORE: 1.00 INCH OR MORE:

[HDD (BASE 65) ] 151 DPTR FM NORMAL 2508 TOTAL FM JUL 1 DPTR FM NORMAL 70

18

-0

31

3

-2

CLEAR (SCALE 0-3) 4 PTCLDY (SCALE 4-7) 14 CLOUDY (SCALE 8-10) 13

[CDD (BASE 65)] 0 TOTAL THIS MO. DPTR FM NORMAL 0 TOTAL FM JAN 1 828

[PRESSURE DATA] HIGHEST SLP 30.67 ON 16 LOWEST SLP 29.25 ON 1

EMARKS] #FINAL-12-08#

DPTR FM NORMAL

6 = FREEZING RAIN OR DRIZZLE

2 = FOG REDUCING VISIBILITY

TO 1/4 MILE OR LESS

8 = SMOKE OR HAZE9 = BLOWING SNOWX = TORNADO

These data are preliminary and have not undergone final quality control by the National Climatic Data Center (NCDC). Therefore, these data are subject to revision. Final and certified climate data can be accessed at the NCDC - http://www.ncdc.noaa.gov.

# ) Monthly/Daily Climate Data

000 CXUS55 KLOT 011314 CF60RD

PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6)

STATION:

CHICAGO-OHARE IL

MONTH:

NOVEMBER

YEAR:

2008

LATITUDE: 41 58 N LONGITUDE: 87 54 W

TEMPERATURE IN F: : PCPN: SNOW:						MIW	1D		: SUNS	SHINE	: SK	<b>′</b>	:PK \	WND_				
1	2	3	4	5	6A	6в	7	8	9 12z	10	11	 12 2мін	13	14	15	16	5 17	18
DY	MAX	MIN	AVG	DEP	HDD	CDD	WTR	SNW					MIN	PSBL	s-s	WX	SPD	DR
1 2 3 4 4 5 6 7 8 9 10 1 14 15 16 17 18 19 20 21 22 23 24 25 6 27 8 29 30 SM	54 67 71 71 65 40 39 38 48 55 42 36 44 43 44 44 44 44 44 44 44 44 44 44 44	48 44 55 6 47 45 5 3 5 6 3 8 4 4 2 5 2 2 2 7 7 2 2 2 2 4 2 2 6 2 3 3 8 6 9 6 9 6 9 6 9 6 9 6 9 6 9 6 9 6 9 6	51 51 51 51 51 51 51 51 51 51 51 51 51 5	6 13 19 17 15 12 -4 -7 -9 -10 2 10 7 -16 -8 -14 -11 -12 0 1 -2 3	14 71 46 10 24 27 32 32 18 26 32 33 31 33 32 33 31 33 32 31 31 31 31 31 31 31 31 31 31 31 31 31		0.00 0.10 0.00 0.00 0.00 0.34 0.06 0.05 T 0.29 0.04 0.06 0.05 T 0.01 0.00 0.00 0.00 0.00 0.14 0.00 0.00	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	8.8 9.3 10.8 13.8 13.8 14.8 14.8 14.8 10.1 10	3 18 18 18 18 18 18 18 18 18 18 18 18 18	210 200 190 160 240 270 260 320 170 210 330 270 330 330 330 270 210 330 270 210 330 270	M M M M M M M M M M M M M M M M M M M	M M M M M M M M M M M M M M M M M M M	5 8 10 9 10 10 9 7 4 7 8 2 6 7 8 4 1 3 1 7	1 8 8 18 18	30 24 24 20 36 33 28 30 28 20 23 32 25 31 32 25 32 30 18 23 30 24 32 31 32 31 32 31 32 31 32 31 32 31 32 31 32 31 32 31 32 31 32 32 32 32 32 32 32 32 32 32 32 32 32	300 280 90 50
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AV	46.3	3 32	. 2					MIS	C		# 28	STST 330	М	М	6	#	MAX(MP) 36 19	

NOTES:

# LAST OF SEVERAL OCCURRENCES

COLUMN 17 PEAK WIND IN M.P.H.

FLIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6), PAGE 2

STATION: CHICAGO-OHARE IL

MONTH:

NOVEMBER

YEAR:

2008

Untitled
LATITUDE: 41 58 N
LONGITUDE: 87 54 W

「TEMPERATURE DATA]	[PRECIPITATION DATA]	SYMBOLS USED IN COLUMN 16				
DPTR FM NORMAL: -0.0 HIGHEST: 73 ON 3 LOWEST: 17 ON 22,21		2 = FOG REDUCING VISIBILITY TO 1/4 MILE OR LESS 3 = THUNDER 4 = ICE PELLETS				
[NO. OF DAYS WITH]	[WEATHER - DAYS WITH]	9 = BLOWING SNOW X = TORNADO				
MAX 90 OR ABOVE: 0	0.01 INCH OR MORE: 11 0.10 INCH OR MORE: 5 0.50 INCH OR MORE: 1 1.00 INCH OR MORE: 0	N = TONINGO				
[HDD (BASE 65) ] TOTAL THIS MO. 766 DPTR FM NORMAL 7 TOTAL FM JUL 1 1206 DPTR FM NORMAL -81	CLEAR (SCALE 0-3) 5 PTCLDY (SCALE 4-7) 15 CLOUDY (SCALE 8-10) 10					
[CDD (BASE 65) ] TOTAL THIS MO. 0 DPTR FM NORMAL 0 TOTAL FM JAN 1 828 DPTR FM NORMAL -2	[PRESSURE DATA] HIGHEST SLP 30.57 ON 18 LOWEST SLP 29.25 ON 30					
TEMARKS] INAL-11-08#						

These data are preliminary and have not undergone final quality control by the National Climatic Data Center (NCDC). Therefore, these data are subject to revision. Final and certified climate data can be accessed at the NCDC - http://www.ncdc.noaa.gov.

# O Monthly/Daily Climate Data

000 CXUS55 KLOT 131945 CF60RD

PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6)

STATION: CHICAGO-OHARE IL

MONTH: MAY 2009 YEAR: 41 58 N LATITUDE: LONGITUDE: 87 54 W

TEMPERATURE IN F:			:	PCPN:		SNOW:	WIN	۷D		: SUNS	SHINE	: SK	Y	:PK	WND			
1	2	3	4	5	6A	6в	7	8	9	10	11	12	13	14	15	16	17	18
DY ===	MAX	MIN	AVG	DEP	HDD	CDD	WTR	SNW		AVG SPD	SPD	DIR	MIN	PSBL	5-S	WX	SPI	D DR
1 2 3 4 5 6 7 8 9 10 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	60 66 70 71 75 77 63 61 70 68 61 62 63 66 84 69 71 73 73	46443491653660355544995555555555555555555555555555555	55575635556555655566555665566556556556556556	0133581191-37-2431-5-663120411-121-5-1	3 0 6	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0.00 0.00 0.00 0.04 1.73 0.02 0.00 T	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0 0 0 0 0	4.6 7.6 8.10 6.0 11 8.4 10 12 13 14 12 10 12 10 11 10 11 10 11	2 22 2 16 3 17 3 17 3 17 3 22 4 23 4 24 5 25 6 27 7 28 8 21 8 21 9 23 1 16 9 18 1 16 1 16 1 16 1 17 1 17 1 18 1 18	250 180 320 100 200 200 200 50 70 40 250 300 340	M M M M M M M M M M M M M M M M M M M	M M M M M M M M M M M M M M M M M M M	7 8 8 5 6 4 10 5 10 6 2 5 2 0 4 6 8 7 10 9 3 6 2	13 18 13 8 13 13 1 1 1 13 18	2: 3: 2: 2: 4: 3: 2: 4: 3: 2: 2: 3: 3: 2: 2: 3: 2: 2: 2: 2: 2: 2: 2: 2: 2: 2: 2: 2: 2:	2 2 2 2 2 2 2 3 0 0 2 2 3 0 0 0 2 8 0 0 0 2 8 0 0 0 0 2 8 0 0 0 0
SM	2188	3 15	23		171	18	3.63	====	0.0	280.	3 ====		M		194			
AV	70.6	5 49	.1						C		# 33	STST 310	M 	M 	6		MAX(M 48 3	РН) 00 

NOTES:

# LAST OF SEVERAL OCCURRENCES

COLUMN 17 PEAK WIND IN M.P.H.

ELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6), PAGE 2

STATION: CHICAGO-OHARE IL

MONTH: MAY

2009 YEAR:

LATITUDE: 41 58 N LONGITUDE: 87 54 W

ERATI		

LOWEST:

#### [PRECIPITATION DATA]

# SYMBOLS USED IN COLUMN 16

AVERAGE	MONTHLY:	59.9
DPTR FM	NORMAL:	1.2
<b>HIGHEST:</b>	84 ON	v 21,20

39 ON 17,12

TOTAL FOR MONTH: 3.63 DPTR FM NORMAL: 0.25

GRTST 24HR 1.74 ON 26-27

SNOW, ICE PELLETS, HAIL GRTST 24HR 0.0 GRTST DEPTH: 0

TOTAL MONTH: 0.0 INCH

[NO. OF DAYS WITH]

[WEA	THER -	- D/	AYS	WIT	H]
	INCH				9

MAX 32 OR BELOW: 0 MAX 90 OR ABOVE: 0 0.50 INCH OR MORE: 3 MIN 32 OR BELOW: 0 MIN O OR BELOW: 1.00 INCH OR MORE: 1

[HDD (BASE 65) ] TOTAL THIS MO. 171 CLEAR (SCALE 0-3) PTCLDY (SCALE 4-7) CLOUDY (SCALE 8-10) DPTR FM NORMAL -61 18 6525 TOTAL FM JUL 1 DPTR FM NORMAL 76

[CDD (BASE 65) ] 18 TOTAL THIS MO.

[PRESSURE DATA] HIGHEST SLP 30.39 ON 17 LOWEST SLP 29.54 ON 9 DPTR FM NORMAL -30 20 TOTAL FM JAN 1 DPTR FM NORMAL -38

EMARKS] ...·INAL~05~09# 1 = FOG OR MIST

2 = FOG REDUCING VISIBILITY TO 1/4 MILE OR LESS

3 = THUNDER

4 = ICE PELLETS

5 = HAIL

6 = FREEZING RAIN OR DRIZZLE 7 = DUSTSTORM OR SANDSTORM: VSBY 1/2 MILE OR LESS

8 = SMOKE OR HAZE9 = BLOWING SNOW

X = TORNADO

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WFO Monthly/Daily Climate Data

000 CXUS55 KLOT 010700 CF60RD

PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6)

STATION: CHICAGO-OHARE IL

MONTH: **AUGUST** 2010 YEAR: LATITUDE: 41 58 N LONGITUDE: 87 54 W

-	ГЕМРЕ	RATU	JRE 3	EN F	•	:	PCPN:	5	SNOW:	1I.W	ND		:SUNS	SHINE	: SK	<b>′</b>	; P	K W	/ND
1	2	3	4	5	6A	6в	7	8	9 12z	10 AVG	11 MX	 12 2MIN	13	14	1.5	16	5 1	.7	18
DY	MAX	MIN	AVG	DEP	HDD	CDD	WTR	SNW	DPTH				MIN	PSBL	S-S	WX	S	PD	DR
1 2 3 4 5 6 7 8 9 10 11 2 13 14 15 16 17 18 19 20 1 22 32 4 2 5 6 2 7 8 2 9 3 3 1 SM	86 84 86 83 83 83 83 89 92 88 89 92 88 89 88 97 88 89 88 98 89 88 89 88 89 88 89 88 89 88 89 88 89 88 89 88 88	657 667 667 667 667 663 663 663 663 663 66	76 76 77 77 73 78 82 83 83 83 83 72 74 77 82 77 83 84 84	2224300579101118300261184240-13714125===================================		11 11 12 11 8 13 15 17 18 18 18 15 10 7 7 9 12 17 14 10 8 12 18	0.00 T 0.28 0.48 0.00 0.00 0.00 0.00 0.00 0.00 0.0	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	6.8 3.3 4.9 10.9 6.0 7.4 6.0 7.5 10.3 11.7 14.7 15.0	18 18 18 18 18 18 18 18 18 18	300 50 290 80 300 240 290 260 310 170 40 70 50 360 330 90 180 180 190	M M M M M M M M M M M M M M M M M M M	M M M M M M M M M M M M M M M M M M M	8762672186477336231	18 18 13 13 1 13 18 13		20 56 29 18 22 41 26 22 21 20 38 18 30 21 82 22 MM 23 24 MM 24 14 14 14 14 14 14 14 14 14 14 14 14 14	50 230 40 270 310 200 220 310 280 80 310 240 290 280 40 60 210 60 M 340 190 180 180 190
AV	====		====	====				====				==== STST				====	==== MAX(		
	- · ·				:				C			270 ====			====		56	27(	

Page 1

## # LAST OF SEVERAL OCCURRENCES

COLUMN 17 PEAK WIND IN M.P.H.

[REMARKS] #FINAL-08-10#

PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6), PAGE 2

STATION: CHICAGO-OHARE IL

MONTH: YEAR:

AUGUST 2010

LATITUDE: 41 58 N LONGITUDE: 87 54 W

	Longitor
[TEMPERATURE DATA]	[PRECIPITATION DATA]
AVERAGE MONTHLY: 76.7 DPTR FM NORMAL: 5.0 HIGHEST: 94 ON 29 LOWEST: 59 ON 27,26	TOTAL FOR MONTH: 1.80 DPTR FM NORMAL: -2.82 GRTST 24HR 0.59 ON 31- 1
LOWEST. 33 ON 27,20	SNOW, ICE PELLETS, HAIL TOTAL MONTH: 0.0 INCH GRTST 24HR 0.0 GRTST DEPTH: 0
[NO. OF DAYS WITH]	[WEATHER - DAYS WITH]
MAX 32 OR BELOW: 0 MAX 90 OR ABOVE: 6 MIN 32 OR BELOW: 0 MIN 0 OR BELOW: 0	0.01 INCH OR MORE: 9 0.10 INCH OR MORE: 5 0.50 INCH OR MORE: 0 1.00 INCH OR MORE: 0
[HDD (BASE 65)] TOTAL THIS MO. 0 DPTR FM NORMAL -9 TOTAL FM JUL 1 0 DPTR FM NORMAL -15	CLEAR (SCALE 0-3) 12 PTCLDY (SCALE 4-7) 19 CLOUDY (SCALE 8-10) 0
[CDD (BASE 65)] TOTAL THIS MO. 371 DPTR FM NORMAL 138 TOTAL FM JAN 1 1084 DPTR FM NORMAL 355	[PRESSURE DATA] HIGHEST SLP M ON M LOWEST SLP 29.19 ON 31

SYMBOLS USED IN COLUMN 16

- 1 = FOG OR MIST
- 2 = FOG REDUCING VISIBILITY TO 1/4 MILE OR LESS
- 3 = THUNDER
- 4 = ICE PELLETS
- 5 = HAIL
- 6 = FREEZING RAIN OR DRIZZLE 7 = DUSTSTORM OR SANDSTORM:VSBY 1/2 MILE OR LESS 8 = SMOKE OR HAZE
- 9 = BLOWING SNOW
- X = TORNADO

These data are preliminary and have not undergone final quality control by the National Climatic Data Center (NCDC). Therefore, these data are subject to revision. Final and certified climate data can be accessed at the NCDC - http://www.ncdc.noaa.gov.

WFO Monthly/Daily Climate Data

000 CXUS55 KLOT 010700 CF6ORD PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6)

STATION: CHICAGO-OHARE IL

MONTH: AUGUST YEAR: 2010 LATITUDE: 41 58 N LONGITUDE: 87 54 W

				-, -,		
TEMPERATURE IN F:	:PCPN:	SNOW:	WIND	:SUNSHINE	: SKY	:PK WND
1 2 3 4 5 6A	6B 7	8 9 12z	10 11 12	13 14	15 16	17 18
DY MAX MIN AVG DEP HDE	CDD WTR		AVG MX 2MIN SPD SPD DIR	MIN PSBL	S-S WX	SPD DR
1 86 65 76 2 0 2 84 67 76 2 0 3 86 66 76 2 0 4 83 71 77 4 0 5 83 68 76 3 0 7 83 62 73 0 0 8 87 69 78 5 0 9 88 72 80 7 0 10 89 75 82 9 0 11 90 75 83 10 0 12 92 74 83 10 0 13 92 73 83 11 0 13 92 73 83 11 0 13 92 73 83 11 0 13 92 73 83 11 0 14 88 72 80 8 0 15 83 66 75 3 0 16 80 63 72 0 0 17 79 64 72 0 0 17 79 64 72 0 0 18 84 63 74 2 0 19 88 66 77 6 0 20 92 71 82 11 0 21 86 71 79 8 0 22 81 68 75 4 0 23 80 65 73 2 0 24 84 64 74 4 0 25 79 61 70 0 0 26 79 59 69 -1 27 86 59 73 3 0 28 88 65 77 7 0 29 94 71 83 14 30 88 74 81 12 0 31 93 75 84 15 0  ===================================	11 T 11 0.28 12 0.48 11 0.00 8 0.00 8 0.00 13 0.08 15 0.15 17 0.00 18 0.00 18 0.00 18 0.25 15 T 10 0.00 7 0.00 7 0.00 7 0.03 9 0.05 12 0.00 14 0.45 10 0.00 8 0.00 17 0.00 18 0.00 19 0.00 10 0.00 10 0.00 11 0.00 12 0.00 13 0.00 14 0.00 15 0.15 16 0.00 17 0.00 17 0.00 18 0.00 19 0.00 10 0.00 10 0.00 11 0.00 12 0.00 13 0.00 14 0.00 15 0.00 16 0.00 17 0.00 17 0.00 18 0.00 19 0.00 10 0.00 10 0.00 10 0.00 11 0.00 12 0.00 13 0.00 14 0.00 15 0.00 16 0.00 17 0.00 17 0.00 18 0.00 19 0.00 10 0.00 10 0.00 10 0.00 11 0.00 12 0.00 13 0.00 14 0.00 15 0.00 16 0.00 17 0.00 17 0.00 18 0.00 19 0.00 10 0.00	0.0 0 0.0 0 0.	4.1 10 100 6.8 18 230 3.3 13 240 4.9 38 270 10.9 22 300 6.5 14 300 8.0 17 200 9.9 30 220 7.1 22 300 4.9 12 50 6.0 17 290 5.7 12 80 7.6 31 300 5.0 13 240 8.8 23 290 9.3 21 260 6.1 13 310 3.5 10 110 5.0 14 220 11.2 22 170 6.0 15 40 8.5 14 70 7.3 14 50 10.3 17 330 5.8 17 360 10.3 17 330 5.8 17 360 10.3 17 330 5.8 17 360 10.3 17 330 5.8 17 360 10.8 17 180 11.4 20 180 11.4 20 180 11.4 20 180 11.4 20 180 15.0 21 190	M M M M M M M M M M M M M M M M M M M	5 18 7 18 7 13 7 13 1 4 6 1 8 13 7 6 18 2 6 13 7 2 1 8 6 4 7 7 1 3 3 6 2 3 1 0 3 5 4 139	18 50 22 230 20 40 56 270 29 310 18 310 22 200 41 220 26 310 22 60 21 280 20 80 38 310 18 240 30 290 26 280 18 40 20 60 18 220 28 210 22 60 M 60 M M 23 340 26 10 M 70 13 190 17 180 24 180 26 180 26 190 ====================================
						========
AV 85.7 67.7	-=======	MISC	7.7 FASTST -> # 38 270	M M		MAX(MPH) 66 270 =======

Page 1

## # LAST OF SEVERAL OCCURRENCES

COLUMN 17 PEAK WIND IN M.P.H.

PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6), PAGE 2 Explanation of the Preliminary Monthly Climate Data (F6) Product These data are preliminary and have not undergone final quality control by the National Climatic Data Center (NCDC). Therefore, these data are subject to revision. Final and certified climate data can be accessed at the NCDC - http://www.ncdc.noaa.gov.

WFO Monthly/Daily Climate Data

CXUS55 KLOT 010700 CF6ORD PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6)

STATION: CHICAGO-OHARE IL

MONTH: JULY
YEAR: 2010
LATITUDE: 41 58 N
LONGITUDE: 87 54 W

TEMPERATURE IN F: :PCPN: SNOW: WIND :SUNSHINE: SKY : PK WND 6в 6A 12Z AVG MX 2MIN DY MAX MIN AVG DEP HDD CDD WTR SNW DPTH SPD SPD DIR MIN PSBL S-S WX SPD DR 5.5 13 1 0.00 0.0 -6 M М 74 -1 2 0.00 0.0 8.1 15 Μ Μ 0.00 9.0 0.0 M Μ  $10.5 \ \overline{24}$ 0.0 0.00 М Μ 0.000.015.3 28 Μ М 7 0.37 9.0 26 5 7 0.0М Μ 36 210 17 0.20 0.06.3 23 М 29 170 Μ 16 0.16 0.0 5.4 14 М Μ 7.5 5 0.0Μ М 14 0.00 8.0 3 2 0.0М Μ 11 0.79 0.0 7.8 Μ Μ  $\bar{21}$ 3.9 7 0.0Μ Μ 0.17 6.1 0.0 М Μ 0.00 0.010.1 20 М М 0.01 0.0 10.1 21 Μ Μ 0.00 0.08.1 Μ 22 0.00 6.9 0.0 М М 77 77 0.01 0.0 9.7 М Μ 7 0.010.0 4.9 М Μ 0.07.2 Μ Μ 0.00 6.8 0.0Μ Μ 7 0.01 0.0 11.9 Μ Μ 2.79 11.8 29 0.0 М Μ 3.64 0.0 8.9 24 Μ Μ 0.00 9.2 17 0.0М Μ -1 0.00 5.2 15 0.0Μ Μ 7 6.4 0.00 0.0Μ Μ 0.00 0.0 9.3 М Μ 7.0 0.00 0.0 Μ Μ 6.1 14 0.0 M Μ 8 0.68 0.0 5.8 17 170 -1 М 22 180 Μ

	Untitled 401 8.84 0.0 247.8	м 160
AV 87.1 68.2	8.0 FAS MISC> # 29	
NOTES: # LAST OF SEVERAL OCCUR	RENCES	
COLUMN 17 PEAK WIND IN	М.Р.Н.	
PRELIMINARY LOCAL CLIMA	TOLOGICAL DATA (WS FORM: F-	-6) , PAGE 2
	STATION MONTH: YEAR: LATITUDI LONGITUI	JULY 2010 E: 41 58 N
[TEMPERATURE DATA]	[PRECIPITATION DATA]	SYMBOLS USED IN COLUMN 16
AVERAGE MONTHLY: 77.6 DPTR FM NORMAL: 4.3 HIGHEST: 94 ON 23 LOWEST: 55 ON 1	TOTAL FOR MONTH: 8.84 DPTR FM NORMAL: 5.33 GRTST 24HR 6.38 ON 23-24  SNOW, ICE PELLETS, HAIL TOTAL MONTH: 0.0 INCH GRTST 24HR 0.0 GRTST DEPTH: 0	2 = FOG REDUCING VISIBILITY TO 1/4 MILE OR LESS 3 = THUNDER 4 = ICE PELLETS 5 = HAIL 6 = FREEZING RAIN OR DRIZZLE 7 = DUSTSTORM OR SANDSTORM: VSBY 1/2 MILE OR LESS
[NO. OF DAYS WITH]	[WEATHER - DAYS WITH]	8 = SMOKE OR HAZE 9 = BLOWING SNOW X = TORNADO
MAX 32 OR BELOW: 0 MAX 90 OR ABOVE: 12 MIN 32 OR BELOW: 0 MIN 0 OR BELOW: 0	0.01 INCH OR MORE: 12 0.10 INCH OR MORE: 8 0.50 INCH OR MORE: 4 1.00 INCH OR MORE: 2	X = TURNADO
[HDD (BASE 65)] TOTAL THIS MO. 0 DPTR FM NORMAL -6 TOTAL FM JUL 1 0 DPTR FM NORMAL -6	CLEAR (SCALE 0-3) 5 PTCLDY (SCALE 4-7) 24 CLOUDY (SCALE 8-10) 2	
[CDD (BASE 65)] TOTAL THIS MO. 401 DPTR FM NORMAL 122 TOTAL FM JAN 1 713 DPTR FM NORMAL 217	[PRESSURE DATA] HIGHEST SLP M ON M LOWEST SLP 29.31 ON 29	
[REMARKS] #FINAL-07-10#		

These data are preliminary and have not undergone final quality control by the National Climatic Data Center (NCDC). Therefore, these data are subject to revision. Final and certified climate data can be accessed at the NCDC - http://www.ncdc.noaa.gov.

WFO Monthly/Daily Climate Data

000 CXUS55 KLOT 010700 CF60RD

PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6)

STATION: CHICAGO-OHARE IL

MONTH: AUGUST YEAR: 2010 LATITUDE: 41 58 N LONGITUDE: 87 54 W

-	ГЕМРЕ	RATU	JRE 3	IN F	:	:	PCPN:	9	SNOW:	WIN	۷D		:SUNS	SHINE	: SKY	Y	:PK V	VND
1	2	3	4	5	6А	6в	7	8	9 12z	10 ΔVG	11 MX	==== 12 2MIN	13	14	15	16	17	18
DY	MAX	MIN	AVG	DEP	HDD	CDD	WTR	SNW	DPTH				MIN	PSBL	S-S	WX	SPD	DR ====
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 6 17 8 19 20 21 22 23 24 25 26 27 28 29 30 31 = :	86 84 83 83 83 83 83 83 83 83 83 83 83 83 83	657 667 667 666 667 775 775 663 663 677 775 775 775 775 775	76 76 77 77 73 78 82 83 83 83 77 77 82 77 77 83 84	222430005791011830026 1184240-13714215		11 12 11 8 8 13 15 17 18 18 18 15 10 7 7 9 12 17 14 10 8 9 5 4 8 16 19	0.00 T 0.28 0.48 0.00 0.00 0.00 0.00 0.00 0.00 0.0	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0		6.8 3.4.9 10.9 10.9 7.4.6 5.7.6 8.7 5.0 10.8 10.8 10.9 10.8 10.9 10.8 10.9 10.8 10.9 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8	3 13 9 38 9 22 5 14 17 30 1 22 9 12 1 12 1 12 1 13 1 13 1 14 1 14	230 240 270 300 200 220 300 290 80 300 240 290 260 310 40 220 40 70 50 360 380 190 180 180 190	M M M M M M M M M M M M M M M M M M M	M M M M M M M M M M M M M M M M M M M	5777114687626721864773362310354	18 18 13 13 13 1 1 13 13 13	18 22 20 56 29 18 22 41 26 22 21 20 38 18 30 26 18 22 M M 23 26 M 13 17 24 26 26	50 230 40 270 310 310 200 220 310 60 280 310 240 290 280 40 60 220 210 60 60 M 340 190 180 180 180 190
==	2657			====:	0 ====	371. =====	1.80 =====	====	0.0			====:	М =====		139			
AV	85.7	67	. /					MIS	C	7.7 -> 7		STST 270	М	М	4	#	MAX (MP) 56 270	-

## # LAST OF SEVERAL OCCURRENCES

COLUMN 17 PEAK WIND IN M.P.H.

PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6), PAGE 2 Explanation of the Preliminary Monthly Climate Data (F6) Product These data are preliminary and have not undergone final quality control by the National Climatic Data Center (NCDC). Therefore, these data are subject to revision. Final and certified climate data can be accessed at the NCDC - http://www.ncdc.noaa.gov.

WFO Monthly/Daily Climate Data

000 CXUS55 KLOT 010700 CF6ORD

PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6)

STATION: CHICAGO-OHARE IL

MONTH: JULY
YEAR: 2010
LATITUDE: 41 58 N
LONGITUDE: 87 54 W

-	TEMP	RATU	JRE ]	IN F	:		: PCPN:		SNOW:	NIW	۷D		SUNS	SHINE	: SKY	<b>/</b>	:PK \	WND
1	2	3	4	5	6A	6в	7	8	9 12z	10	11 MX	12 2MTN	13	14	15	16	17	18
DY	MAX MIN AVG DEP I					CDD	WTR	SNW	DPTH				MIN	PSBL	S-S	WX	SPD	DR ====
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 20 21 22 23 24 25 26 27 28 29 30 31 20 21 21 21 21 21 21 21 21 21 21 21 21 21	77 87 91 93 88 89 90 93 88 89 90 93 84 89 90 91 88 88 88 88 88 88 88 88 88 88 88 88 88	55968877177096657096616772966616876965	66 714 80 82 82 82 776 777 80 82 778 81 778 82 778 778 778 778 778 778	-61283109866324785883386840147111		6 9	0.00 0.00 0.00 0.00 0.00 0.37 0.20 0.16 T 0.00 0.01 0.00 0.01 0.01 0.01 0.01 0.01			5.8 9.0 10.15.9 6.5 7.8 10.10.8 6.9 4.7 6.11.11.8 9.7 6.9	1 15 1 17 1 17 1 17 1 18 1 18 1 18 1 18 1 18	210 250 320 30 100 220 300 70	M M M M M M M M M M M M M M M M M M M	M M M M M M M M M M M M M M M M M M M	1004555755677461366747795647605	13 18 13 8 11 11 18 1 3 8 13 11 18 13 13	24 23 31 36 29 20 21 22 25 21 22 25 24 28 37 26 27 21 27 27 27 27 27	80 220 180 240 210 210 170 40 320 190 70 60 170 300 250 300 250 120 200 240 310 60 80 210 50 50 50 50 50 50 50 50 50 50 50 50 50

Untitled SM 2700 2114 0 401 8.84 0.0 247.8

0.0 247.8 M 160

AV 87.1 68.2 8.0 FASTST M M 5 MAX(MPH) MISC ---> # 29 250 # 37 240

NOTES:

# LAST OF SEVERAL OCCURRENCES

COLUMN 17 PEAK WIND IN M.P.H.

PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6), PAGE 2

Explanation of the Preliminary Monthly Climate Data (F6) Product These data are preliminary and have not undergone final quality control by the National Climatic Data Center (NCDC). Therefore, these data are subject to revision. Final and certified climate data can be accessed at the NCDC - http://www.ncdc.noaa.gov.

WFO Monthly/Daily Climate Data

000

CXUS55 KLOT 011158

CF6ORD

PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6)

STATION: CHICAGO-OHARE IL

MONTH: JUNE
YEAR: 2010
LATITUDE: 41 58 N
LONGITUDE: 87 54 W

	TEMPE	ERATI	JRE :	IN F	:	:	PCPN:		SNOW:	NI.W	ND		:SUNS	SHINE	SK	Y	:PK \	WND
1	2	3	4	5	6A	6в	7	8	9 12 <i>7</i>	10 AVG	11 MX	12 2MIN	13	14	15	16	17	18
DY ===	MAX	MIN	AVG	DEP	HDD	CDD	WTR	SNW	DPTH				MIN	PSBL	S-S	WX ======	SPD	DR ====
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25	85 77 71 83 76 76 76 83 77 71 79 82 84 90 85 87 84 84 84	637 556 557 655 558 658 669 669 669 662	74 67 64 70 66 62 63 74 67 67 77 77 77 77 77 73	10 2 -1 5 0 -4 -3 7 10 3 -1 -3 2 4 5 10 7 4 6 7 8 5 2	001000320000000000000000000000000000000	2 0 5 1 0 9 3 12 5 2 0 5 8 9 14 11 12 13 10	0.00 1.02 0.00 0.00 0.15 T 0.00 0.45 0.00 0.02 0.34 0.25 T 0.59 0.00 0.87 0.00 0.87 0.00	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	7.8 7.8 7.8 11.2 6.9 10.8 5.0 7.3 10.4 10.4 11.5 8.4 6.9	7 17 14 14 14 12 13 13 14 14 15 16 16 17 16 17 17 18 18 18 18 18 18 18 18 18 18 18 18 18	340 50 220 10 320 80 130 280 70 190 140 40 290 300 170 270 290 210 220	M M M M M M M M M M M M M	M M M M M M M M M M M M M M M M M M M	6 7	18 13 13 1 1 1 13 138 18 1 138 8 1238 133 133	22 24 31 39 36 25 28 33 22 17 28 20 21 60 35 24 58 21 36 28 22 25	240 70 30 230 10 320 70 120 280 60 200 40 290 50 180 260 260 200 200 200 180 210 210 210 210 210 210 210 21

									Unti	tled								
26	87	69	78	7	0	13	0.85	0.0	0	6.7	25	310	M	M	7	13	36	310
27	85	72	79	8	ŏ		0.54	0.0	Ŏ	9.1	22	270	М	М	8	13	31	280
28	82	63	73	ž	ň		0.00	0.0	Ŏ	11.3	21	300	М	М	5		28	60
29	75	59	67	-4	ŏ		0.00	0.0	ŏ		21	60	М	M	4		26	50
30	, 5 75	56	66	-Ġ	ŏ	,	0.00	0.0	ō	6.0	15	40	М	M	2		28	50
===		====	====	====	===	====		=====		=====		====	=====		====	===	:======	====
SM	2405	186	6		6	200	6.17		$0.0^{2}$	247.1			М		198			
===		====	====	====	===	====		====	=====	=====	===	====			====	===	=======	====
ΑV	80.2	62.	2									STST	М	M	7		MAX (MPI	
								MIS	C	-> #	46	270					60 26	_

NOTES:

# LAST OF SEVERAL OCCURRENCES

COLUMN 17 PEAK WIND IN M.P.H.

PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6) , PAGE 2

STATION: CHICAGO-OHARE IL

JUNE MONTH: YEAR: 2010 41 58 N LATITUDE: 87 54 W LONGITUDE:

[TEMPERATURE DATA]

[NO. OF DAYS WITH]

## [PRECIPITATION DATA]

## SYMBOLS USED IN COLUMN 16

AVERAGE MONTHLY: 71.2 DPTR FM NORMAL: 3.0 90 ON 18 HIGHEST: 54 ON 7 LOWEST:

6.17 TOTAL FOR MONTH: 2.54 DPTR FM NORMAL: GRTST 24HR 1.02 ON 2-2

SNOW, ICE PELLETS, HAIL TOTAL MONTH: 0.0 INCH 0.0 GRTST 24HR

0 GRTST DEPTH:

[WEATHER - DAYS WITH]

0.01 INCH OR MORE: 12 MAX 32 OR BELOW: 0 11 MAX 90 OR ABOVE: 0.10 INCH OR MORE: 1 0.50 INCH OR MORE: 6 MIN 32 OR BELOW: 0 1.00 INCH OR MORE: 1 MIN O OR BELOW: 0

[HDD (BASE 65) ] CLEAR (SCALE 0-3) PTCLDY (SCALE 4-7) 6 TOTAL THIS MO. 17 -43 DPTR FM NORMAL CLOUDY (SCALE 8-10) 11 5970 TOTAL FM JUL 1 DPTR FM NORMAL -528

[CDD (BASE 65) ] 200 TOTAL THIS MO. 41 DPTR FM NORMAL 312 TOTAL FM JAN 1

DPTR FM NORMAL 95

[PRESSURE DATA] HIGHEST SLP M ON M LOWEST SLP 29.49 ON 27

[REMARKS] #FINAL-06-10# 1 = FOG OR MIST

2 = FOG REDUCING VISIBILITY TO 1/4 MILE OR LESS

3 = THUNDER4 = ICE PELLETS

5 = HAIL

6 = FREEZING RAIN OR DRIZZLE 7 = DUSTSTORM OR SANDSTORM: VSBY 1/2 MILE OR LESS

8 = SMOKE OR HAZE9 = BLOWING SNOWX = TORNADO

These data are preliminary and have not undergone final quality control by the National Climatic Data Center (NCDC). Therefore, these data are subject to revision. Final and certified climate data can be accessed at the NCDC - http://www.ncdc.noaa.gov.

WFO Monthly/Daily Climate Data

000 CXUS55 KLOT 010700 CF60RD

PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6)

STATION: CHICAGO-OHARE IL

MONTH: AUGUST YEAR: 2010 LATITUDE: 41 58 N LONGITUDE: 87 54 W

٦	ГЕМРЕ	RATI	JRE 3	N F	:	;	PCPN:		SNOW:	WIN	ND		:SUNS	SHINE	: SKY	<b>′</b>	:PK V	VND
1	2	3	4	5	6A	6в	7	8	9 12Z	10 AVG	11 MY	==== 12 2мін	13	14	15	16	17	18
DY	MAX	MIN	AVG	DEP	HDD	CDD	WTR	SNW	DPTH				MIN	PSBL	S-S	WX	SPD	DR ====
123456789111234567891112134151617181921223425678931	86 84 86 83 82 83 87 88 89 92 88 89 92 88 89 89 84 79 86 88 94 88 94 88	65 66 67 66 67 66 67 66 63 66 67 71 68 66 67 71 68 67 71 72 68 71 74 75 74 75 74 75 74 75 74 75 74 75 74 75 74 75 76 77 77 77 77 77 77 77 77 77 77 77 77	76 76 77 76 73 78 82 83 83 83 83 87 72 74 77 82 77 83 77 84	2 2 2 4 3 0 0 5 7 9 10 11 8 3 0 0 2 6 11 8 4 2 4 0 15 15 15 15 15 15 15 15 15 15 15 15 15	000000000000000000000000000000000000000	11 12 13 13 15 17 18 18 15 10 7 7 9 12 14 10 8 9 5 4 8 12 18 16	0.00 T 0.28 0.48 0.00 0.00 0.00 0.00 0.00 0.00 0.0	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	6.8 4.9 10.9 10.9 7.6 8.0 9.6 5.0 11.2 10.9 11.2 10.9	18 13 18 18 18 18 18 18 18 18 18 18 18 18 18	220 300 50 290 80 300 240 290 260 310 170 40 750 360 330 90 180 190	M M M M M M M M M M M M M M M M M M M	M M M M M M M M M M M M M M M M M M M	777114687626721864773362310354	18 13 13 13 1 13 18 13	18 22 41 26 22 21 20 38 18 30 26 18 22 M M 23 26 M 13 17 24	220 310 60 280 80 310 240 290
AV	85.7	7 67	.7		_			MIS	c			STST 270		М	4	#	MAX (MPI 56 27	

## # LAST OF SEVERAL OCCURRENCES

COLUMN 17 PEAK WIND IN M.P.H.

PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6), PAGE 2 Explanation of the Preliminary Monthly Climate Data (F6) Product These data are preliminary and have not undergone final quality control by the National Climatic Data Center (NCDC). Therefore, these data are subject to revision. Final and certified climate data can be accessed at the NCDC - http://www.ncdc.noaa.gov.

WFO Monthly/Daily Climate Data

000 CXUS55 KLOT 010700 CF60RD

PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6)

STATION: CHICAGO-OHARE IL MONTH: JULY

YEAR: 2010 LATITUDE: 41 58 N LONGITUDE: 87 54 W

_	ГЕМРЕ	ERATU	JRE I	IN F	:	:	PCPN:		SNOW:	IIW	ND		:SUNS	SHINE	: SK	<b>′</b>	:PK \	WND
1	2	3	4	5	6A	6в	7	8	9 127	10	11 MY	12 2MIN	13	14	15	16	17	18
DY	MAX	MIN	AVG	DEP	HDD	CDD	WTR	SNW	DPTH				MIN	PSBL	S-S	WX	SPD	DR
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 20 31 20 31 20 31 31 31 31 31 31 31 31 31 31 31 31 31	77 837 91 93 88 89 90 93 88 89 90 93 84 86 90 94 87 88 88 88 80 80 80 80 80 80 80 80 80 80	559 608 731 730 665 701 712 668 737 669 661 673 673 673 673 674 675	66 71 85 82 82 81 76 75 77 82 77 82 77 82 77 81 75 73	6128319866324785883386840147111 -1		6 9 15 20 17 16 14 11 10 12 15 16 14 17 17 12 17 17 17 17 17 17 17 17 17 17 17 17 17	0.00 0.00 0.00 0.00 0.00 0.37 0.20 0.16 T 0.00 0.79 T 0.17 0.00 0.01 0.01 0.01 0.01 0.01 2.79 3.64 0.00 0.00 0.00 0.00 0.01	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	10. 10. 8. 6. 9. 4. 7. 6. 11. 8. 9. 5. 6.	15 15 17 17 17 17 17 17 17 17 17 17 17 17 17	210 210 210 340 330 330 200 50 70 170 300 210 220 320 210 250 320 20 210 220 320 270 300 270	M M M M M M M M M M M M M M M M M M M	M M M M M M M M M M M M M M M M M M M	1004555755677461366747795647605	13 18 13 8 13 1 11 18 1 3 18 13 13 13	24 23 31 36 36 29 21 22 25 21 22 25 24 21 22 23 21 22 23 21 21 22 23 24 21 22 23 24 24 24 25 26 27 27 27 27 27 27 27 27 27 27 27 27 27	80 220 180 240 200 210 170 40 60 320 190 200 250 300 250 300 2200 240 310 60 80 210 320 150 150 180

NOTES:

# LAST OF SEVERAL OCCURRENCES

COLUMN 17 PEAK WIND IN M.P.H.

PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6) , PAGE 2

Explanation of the Preliminary Monthly Climate Data (F6) Product These data are preliminary and have not undergone final quality control by the National Climatic Data Center (NCDC). Therefore, these data are subject to revision. Final and certified climate data can be accessed at the NCDC - http://www.ncdc.noaa.gov.

WFO Monthly/Daily Climate Data

CXUS55 KLOT 011158 CF60RD

PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6)

STATION: CHICAGO-OHARE IL

MONTH: JUNE
YEAR: 2010
LATITUDE: 41 58 N
LONGITUDE: 87 54 W

:PCPN: SNOW: WIND :SUNSHINE: SKY :PK WND TEMPERATURE IN F: 5 6A 6B 10 11 12 14 15 AVG MX 2MIN Z SNW DPTH SPD SPD DIR MIN PSBL S-S WX SPD DR DY MAX MIN AVG DEP HDD CDD WTR \_\_\_\_\_\_ 22 240 9 0.00 6.0 17 0.08.7 1.02 0.0 М М -1 0.00 0.0 7.8 14 М М М 31 230 9.8 Μ 0.00 0.0Μ 0.150.0 7.8 M Μ 7 0 11.2 36 320 0.0М М -4 0 0.00 0.0 6.9 14 М Μ -3 7 0 0.45 10.1 22 10 1 28 120 0.0 Μ М 0 10.8 23 33 280 9 0.00 0.0 Μ 3 0.00 6.7 Μ 0.0М 22 12 0.02 0.0 10.5 М М 8.1 0.34 0.0 1.5 М М -1 0.25 0.0 5.0 М -3 2 6.6 0.0М Μ 0.59 5.5 M 0.0 M 9.0 20 0.00 0.0 М Μ 9 0.00 0.0 7.5 14 Μ 10.4 46 60 260 14 0.87 0.0 Μ Μ 10.6 25 290 М 11 0.00 0.0Μ 0.04.7 М М Т 22 11 0.22 8.4 0.0 М Μ 6.9 21 220 0.00 0.0 М Μ 36 180 0.87 0.0 0 11.5 M Μ 28 310 10 0.00 0.0 8.7 M М 7.3 16 230 25 190 8 0.00 0.0 М М Page 3

									Unti	itled								
26	87	69	78	7	0	13	0.85	0.0	0	6.7	25	310	М	М	7	13	36	310
27	85	72	79	8	0	14	0.54	0.0	0	9.1	22	270	М	М	8	13	31	280
28	82	63	73	Ž	Ō		0.00	0.0	0	11.3	21	300	М	M	5		28	60
29	75	59	67	-4	Ō	2	0.00	0.0	0	7.5	21	60	М	M	4		26	50
30	75	56	66	-6	Ō		0.00	0.0	0	6.0	15	40	М	M	2		28	50
SM	2405	186	==== 6			200	6.17		0.0	247.1			М		198			
AV	80.2	62.	== 2					MISC		8.2			М	М	7	#	MAX (MPH 60 260	<del>1</del> )

NOTES:

# LAST OF SEVERAL OCCURRENCES

COLUMN 17 PEAK WIND IN M.P.H.

PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6), PAGE 2 Explanation of the Preliminary Monthly Climate Data (F6) Product These data are preliminary and have not undergone final quality control by the National Climatic Data Center (NCDC). Therefore, these data are subject to revision. Final and certified climate data can be accessed at the NCDC – http://www.ncdc.noaa.gov.

WFO Monthly/Daily Climate Data

000 CXUS55 KLOT 010700 CF60RD

PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6)

STATION: CHICAGO-OHARE IL

MONTH: MAY
YEAR: 2010
LATITUDE: 41 58 N
LONGITUDE: 87 54 W

	TEMPE	ERATU	JRE I	IN F	:	:	PCPN:		SNOW:	1I.W	ND		:SUNS	SHINE	: SK\	<b>′</b>	:PK V	VND
1	2	3	4	5	6A	6в	7	8	9 12Z	10 AVG	11 MX	12 2MIN	13	14	15	16	17	18
DY ==	MAX	MIN	AVG	DEP	HDD	CDD	WTR	SNW	DPTH				MIN	PSBL	S-S	WX	SPD	DR
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	58 52 51 73 66 61 66 58 65 74	58 53 50 56 46 42 38 41 44 48 47 43 41 50 46 44		11 7 7 11 9 0 -4 -10 -8 -7 -9 -9 3 -1 -6 -5 -3 -1	17 4 8 13 11 11 9 6	000000000000000000000000000000000000000		0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	6.4 9.4 12.8 9.3 15.4 14.4 9.9 10.4 12.3 11.3 9.8 6.4 7.8	4 21 2 28 3 25 1 17 2 30 2 30 4 14 2 30 9 29 4 21 3 18 3 18 3 18 3 18 4 16	280 230 220 290 50 120 280 100 120 120 260 260 280 40 50 40 40	M M M M M M M M M M M M	M M M M M M M M M M M M M	8 7 3 4 5 5 8 9 10 7 5 8 7 10 8 3 9	1 1 3 138 1 1 1238 13	25 22 30 36 33 24 38 39 22 36 37 25 38 30 M 35 26 39 30 26	

21 22 23 24 25 26 27 28 29	73 74 89 91 88 87 77 79 86 91	56 58 62 70 69 66 61 57	65 66 76 81 79 77 69 68 73	5 15 19 17 15 6 5 10	0 0 0 0 0 0	1 11 16 14 12 4 3 8 11	0.21 0.00 0.00 0.00 0.00 T 0.00 0.00 0.00	0.0 0.0 0.0 0.0 0.0 0.0 0.0	0 0 0 0 0 0 0	itled 6.3 5.4 10.0 8.2 7.8 4.5 10.7 8.4 5.8	18 15 21 16 18 21 20 17 13	150 130 190 100 120 280 40 40 60 200	M M M M M M M	M M M M M M M	9 5 2 5 7 5 2 2 3	18 128 1 8 3	3 20 25 22 23 30 28 38 23 18	190 80 130 280 50 50 50 160
31	81	66	74	_10 	0	9 ====	0.26	0.0	0	4.7	31	340 =====	М ======	M	7 -===	13 ====	45 	
SM	2206				184	89	4.90		0.0				М		193			
AV	71.2	52.	2	,				MISC		9.1 -> #	FAS		М	М	6	#	MAX(MP 45 33	

NOTES:

# LAST OF SEVERAL OCCURRENCES

COLUMN 17 PEAK WIND IN M.P.H.

PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6) , PAGE 2

STATION: CHICAGO-OHARE IL

MONTH: MAY YEAR: 2010

LATITUDE: 41 58 N LONGITUDE: 87 54 W

[TEMPERATURE	DATA]	[PRECIPITATION	DATA]
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AVERAGE MONTHLY: 61.7 TOTAL FOR MONTH: 4.90

DPTR FM NORMAL: 3.0 DPTR FM NORMAL: 1.52 HIGHEST: 91 ON 30,24 GRTST 24HR 1.61 ON 12-13

LOWEST: 38 ON 9

SNOW, ICE PELLETS, HAIL TOTAL MONTH: 0.0 INCH

GRTST 24HR 0.0 GRTST DEPTH: 0

[NO. OF DAYS WITH] [WEATHER - DAYS WITH]

12 MAX 32 OR BELOW: 0 0.01 INCH OR MORE: 8 2 0.10 INCH OR MORE: MAX 90 OR ABOVE: 0 4 MIN 32 OR BELOW: 0.50 INCH OR MORE: MIN O OR BELOW: 0 1.00 INCH OR MORE: 1

[HDD (BASE 65)]
TOTAL THIS MO. 184 CLEAR (SCALE 0-3) :
DPTR FM NORMAL -48 PTCLDY (SCALE 4-7) 18
TOTAL FM JUL 1 5964 CLOUDY (SCALE 8-10) 8

-485

[CDD (BASE 65)]
TOTAL THIS MO. 89
DPTR FM NORMAL 41 [PRESSURE DATA]
TOTAL FM JAN 1 112 HIGHEST SLP M ON M
DPTR FM NORMAL 54 LOWEST SLP 29.49 ON 1

[REMARKS] #FINAL-05-10#

DPTR FM NORMAL

## SYMBOLS USED IN COLUMN 16

1 = FOG OR MIST

2 = FOG REDUCING VISIBILITY TO 1/4 MILE OR LESS

3 = THUNDER 4 = ICE PELLETS

5 = HAIL

6 = FREEZING RAIN OR DRIZZLE 7 = DUSTSTORM OR SANDSTORM: VSBY 1/2 MILE OR LESS

8 = SMOKE OR HAZE 9 = BLOWING SNOW

X = TORNADO

Untitled
Explanation of the Preliminary Monthly Climate Data (F6) Product
These data are preliminary and have not undergone final quality control by the
National Climatic Data Center (NCDC). Therefore, these data are subject to revision.
Final and certified climate data can be accessed at the NCDC http://www.ncdc.noaa.gov.

WFO Monthly/Daily Climate Data

000 CXUS55 KLOT 010700 CF60RD

PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6)

STATION: CHICAGO-OHARE IL

MONTH: MAY 2010 YEAR: 41 58 N 87 54 W LATITUDE: LONGITUDE:

-	ГЕМРЕ	RATI	JRE 3	EN F	:	;	PCPN:	S	: wow	NIW	ND		SUNS	SHINE	: SK	Y	:PK	₩ND
1	2	3	4	5	6A	6B	7	8	9 12z	10	11 MY	12 2MIN	13	14	15	16	17	18
DY	MAX	MIN	AVG	DEP	HDD	CDD	WTR	SNW	DPTH				MIN	PSBL	S-S	WX =====	5PD	DR ====
1 2 3 4 4 5 6 7 8 9 10 11 12 13 144 15 6 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 ===	70 70 72 77 72 63 55 55 55 55 55 55 56 66 66 77 74 89 87 77 86 81	533066 5505566 44444444 44546447 55666 55666 10 10 10 10 10 10 10 10 10 10 10 10 10	641 641 655 645 645 655 655 667 677 667 774 818	11.771190-40-87-931-65-51917156510	4 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0.12 1.49 0.00 0.00 0.00 0.01 0.00 0.05 0.21 0.00 0.00 0.00 0.00 0.00 0.00	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0		6.2 9.4 14.2 12.8 13.2 15.2 10.2 11.3 10.2 10.4 10.8 10.8 10.8 10.8 10.8 10.8 10.8 10.8	1 164 2184 2284 2284 239 231 188 238 188 188 188 188 188 188 188 188 188 1	230 220 290 120 280 100 120 100 260 280 40 40 110 130 130 120 280 40 40 40 120 20 20 20 20 20 20 20 20 20 20 20 20 2	M ====	M M M M M M M M M M M M M M M M M M M	2 2 3 7	1 1 3 138 1 1 1238 13 18 128 1 8 3	25 22 30 36 33 24 38 39 22 36 37 25 38 30 26 22 23 30 28 38 28 39 21 22 23 30 28 31 28 31 28 31 28 31 31 31 31 31 31 31 31 31 31 31 31 31	150 100 190 80 130 280 50 50 50 160
==	220				184 ====	89 ====	4.90 =====	====	0.0 =====	===:=:	===	====	M ====	=====	193 ====		====	====
AV	71.	2 52	. 2					MIS	C			STST. 120	М 	М 	6	M # 4	AX(MP 5 33	

## NOTES:

DPTR FM NORMAL

[REMARKS] #FINAL-05-10#

# LAST OF SEVERAL OCCURRENCES

COLUMN 17 PEAK WIND IN M.P.H.

PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6), PAGE 2

STATION: CHICAGO-OHARE IL MAY

MONTH: YEAR:

2010 41 58 N LATITUDE: LONGITUDE: 87 54 W

[TEMPERATURE DATA] [PRECIPITATION DATA] AVERAGE MONTHLY: 61.7 4.90 TOTAL FOR MONTH: DPTR FM NORMAL: DPTR FM NORMAL: 3.0 1.52 91 ON 30,24 GRTST 24HR 1.61 ON 12-13 HIGHEST: LOWEST: 38 ON 9 SNOW, ICE PELLETS, HAIL TOTAL MONTH: 0.0 INCH 0.0 INCH GRTST 24HR 0.0 GRTST DEPTH: 0 [NO. OF DAYS WITH] [WEATHER - DAYS WITH] MAX 32 OR BELOW: MAX 90 OR ABOVE: 0.01 INCH OR MORE: 0.10 INCH OR MORE: 12 2 8 MIN 32 OR BELOW: 0 0.50 INCH OR MORE: 4 MIN O OR BELOW: 1.00 INCH OR MORE: 0 1 [HDD (BASE 65) ] 184 TOTAL THIS MO. CLEAR (SCALE 0-3) PTCLDY (SCALE 4-7) DPTR FM NORMAL -48 18 TOTAL FM JUL 1 5964 CLOUDY (SCALE 8-10) DPTR FM NORMAL -485 [CDD (BASE 65) ] 89 TOTAL THIS MO. DPTR FM NORMAL 41 [PRESSURE DATA] TOTAL FM JAN 1 112 HIGHEST SLP M ON M

54

SYMBOLS USED IN COLUMN 16

1 = FOG OR MIST

2 = FOG REDUCING VISIBILITY TO 1/4 MILE OR LESS

3 = THUNDER

4 = ICE PELLETS

5 = HAIL

6 = FREEZING RAIN OR DRIZZLE 7 = DUSTSTORM OR SANDSTORM:VSBY 1/2 MILE OR LESS

8 = SMOKE OR HAZE9 = BLOWING SNOW

X = TORNADO

LOWEST SLP 29.49 ON 1

These data are preliminary and have not undergone final quality control by the National Climatic Data Center (NCDC). Therefore, these data are subject to revision. Final and certified climate data can be accessed at the NCDC - http://www.ncdc.noaa.gov.

WFO Monthly/Daily Climate Data

000 CXUS55 KLOT 010700 CF60RD

PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6)

STATION: CHICAGO-OHARE IL

MONTH: APRIL 2010 LATITUDE: 41 58 N LONGITUDE: 87 54 W

	ГЕМРЕ	RATU	JRE 3	EN F	•		PCPN:	5	SNOW:	WIN	ND		SUNS	SHINE	: SK	Y	:PK	W	۷D
1	2	3	4	5	6A	6в	7	8	9 12z	10 4VG	11 MX	12 2MIN	13	14	15	1.6	5 17		18
DY ===	MAX =====	MIN	AVG	DEP	HDD	CDD	WTR	SNW					MIN	PSBL	S-S	WX	SP	D [	OR ===
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 8 29 3	831 59 76 76 40 56 74 63 80 60 63 60 63 60 63 60 63 60 63 60 60 60 60 60 60 60 60 60 60 60 60 60	54 59 49 30 47 31 31 31 44 44 46 46 47 31 31 47 47 31 47 47 47 47 47 47 47 47 47 47 47 47 47	69 54 54 54 54 54 54 54 55 54 55 56 57 58 58 58 58 58 58 58 58 58 58	26 27 11 14 17 18 -3 10 9 16 24 6 0 -5 -3 22 -1 25 3 4 -3 10 10 -3 10 -10 -10 -10 -10 -10 -10 -10 -10 -10	0 0 11 7 4 3 22 8 9 2 0 11 17 11 14 13 16 13 11 10 11 10 11 11 11 11 11 11 11 11 11	500000000000000000000000000000000000000	0.00	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0		15.3 17.6 11.5 11.6 8.7 11.6 11.6 11.5 11.5 11.5 11.5 11.5 11.5	5 36 3 24 3 24 4 25 5 47 7 25 6 22 7 20 6 20 6 20 6 20 6 20 6 20 7 24 8 20 8 20 9 20	270 200	M M M M M M M M M M M M M M M M M M M	M M M M M M M M M M M M M M M M M M M	8 7	138 1 1 1 8 8 8	3 3 4 3 3 3 3 2 2 2 2 2 2 2 2 2 2 2 2 2	8158189M5M8823512639341061119	190 190 270 200 320 230 350 40 50 50 50 40 40 40 40 40 40 190
ا <sup>ب</sup> اد ⇔ AV	65.5	====					3.01	====			===	==== STST	յνլ ===== M	 M	196 ====: 7	====	MAX(M	₽H.) ===	=== 1
								MISC	 ======	-> #	# 47 ====	310		=======================================	-===	#	•	20	

<sup>#</sup> LAST OF SEVERAL OCCURRENCES

## COLUMN 17 PEAK WIND IN M.P.H.

PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6) , PAGE 2

STATION: CHICAGO-OHARE IL

MONTH: APRIL 2010 YEAR: LATITUDE: 41 58 N LONGITUDE: 87 54 W

	LONGITOD	/L: 07 JT W
[TEMPERATURE DATA]	[PRECIPITATION DATA]	SYMBOLS USED IN COLUMN 16
DPTR FM NORMAL: 6.8	TOTAL FOR MONTH: 3.01 DPTR FM NORMAL: -0.67 GRTST 24HR 1.19 ON 5-6  SNOW, ICE PELLETS, HAIL TOTAL MONTH: T GRTST 24HR T ON 8-8 GRTST DEPTH: 0	2 = FOG REDUCING VISIBILITY TO 1/4 MILE OR LESS 3 = THUNDER
[NO. OF DAYS WITH]	[WEATHER - DAYS WITH]	
MAX 90 OR ABOVE: 0	0.01 INCH OR MORE: 10 0.10 INCH OR MORE: 7 0.50 INCH OR MORE: 2 1.00 INCH OR MORE: 0	X - TORREDO
[HDD (BASE 65)] TOTAL THIS MO. 329 DPTR FM NORMAL -184 TOTAL FM JUL 1 5780 DPTR FM NORMAL -437	PTCLDY (SCALE 4-7) 18	
[CDD (BASE 65) ]		

[PRESSURE DATA]

HIGHEST SLP M ON M LOWEST SLP 29.22 ON 25

[REMARKS] #FINAL-04-10#

TOTAL THIS MO.

DPTR FM NORMAL

TOTAL FM JAN 1

DPTR FM NORMAL

23

14

23 13

These data are preliminary and have not undergone final quality control by the National Climatic Data Center (NCDC). Therefore, these data are subject to revision. Final and certified climate data can be accessed at the NCDC - http://www.ncdc.noaa.gov.

WFO Monthly/Daily Climate Data

000 CXUS55 KLOT 010700 CF60RD

PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6)

STATION: CHICAGO-OHARE IL

MONTH: MARCH 2010 LATITUDE: 41 58 N LONGITUDE: 87 54 W

-	ТЕМРЕ	ERATI	JRE I	EN F	:	:	PCPN:	9	SNOW:	WIN	ND		:SUNS	SHINE	: SK	Y	:	PK V	VND
1	2	3	4	5	6A	6в	7	8	9 12Z	10 4VG	11 MY	12 2MIN	13	14	15	1	==== 6	17	18
DY ===	MAX	MIN	AVG	DEP	HDD	CDD	WTR	SNW	DPTH				MIN	PSBL	S-S	WX		SPD	DR
1234567891011213415678921223425627289331	36339 4238 45660555 464512 66555 4655 477 677 677 677 677 677 677 677 677 677	27 23 24 22 23 26 33 44 40 43 35 31 33 34 33 34 35 31 31 31 31 31 31 31 31 31 31 31 31 31		0 -4 -1 -1 -2 5 7 19 16 12 7 8 7 11 0 13 14 -4 -3 -4 5 2				0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	3 3 3 2 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		15 14 15 16 17 16 17 17 18 18 17 18 18 18 18 18 18 18 18 18 18 18 18 18	200 60 120 210 130 30 40 40 30 60 80		M M M M M M M M M M M M M M M M M M M	8 4 2 10 9 2 10 6 5 8	8 18 12 18 13 1 1 1 1		26 28 28 28 24 20 32 24 37 33 22 33 32 28 32 28 32 28 32 32 33 32 32 32 32 32 32 32 32 32 32	30 30 40 40 60 210 200 60 190 140 40 30 30 50 240 30 80 40 10 60 80 210 180 210
SM	1563	====			715 	0 =====	1.55 =====	====			====	====		<b>===</b>	201. =====	===		====	
AV	50.4	33.	. U					MISO			2 FA: # 36	STST 20	M =====	M ========	6 =====	#		(MPH (MPH (MPH)	

Page 1

# # LAST OF SEVERAL OCCURRENCES

COLUMN 17 PEAK WIND IN M.P.H.

PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6), PAGE 2

STATION: CHICAGO-OHARE IL MARCH MONTH:

2010 YEAR:

41 58 N LATITUDE:

	LONGITUD	DE: 87 54 W
[TEMPERATURE DATA]	[PRECIPITATION DATA]	SYMBOLS USED IN COLUMN 16
DPTR FM NORMAL: 4.4	GRTST 24HR 0.61 ON 13-13  SNOW, ICE PELLETS, HAIL TOTAL MONTH: 1.8 INCHES GRTST 24HR 1.8 ON M	2 = FOG REDUCING VISIBILITY TO 1/4 MILE OR LESS 3 = THUNDER 4 = ICE PELLETS 5 = HAIL 6 = FREEZING RAIN OR DRIZZLE 7 = DUSTSTORM OR SANDSTORM: VSBY 1/2 MILE OR LESS
[NO. OF DAYS WITH]	[WEATHER - DAYS WITH]	8 = SMOKE OR HAZE 9 = BLOWING SNOW X = TORNADO
	0.01 INCH OR MORE: 10 0.10 INCH OR MORE: 3 0.50 INCH OR MORE: 1 1.00 INCH OR MORE: 0	X - TOMADO
[HDD (BASE 65)] TOTAL THIS MO. 715 DPTR FM NORMAL -143 TOTAL FM JUL 1 5451	PTCLDY (SCALE 4-7) 11	

[CDD (BASE 65) ] TOTAL THIS MO. DPTR FM NORMAL

DPTR FM NORMAL -253

-1. [PRESSURE DATA] TOTAL FM JAN 1 0

HIGHEST SLP M ON M LOWEST SLP 28.92 ON 31 DPTR FM NORMAL -1

0

[REMARKS] #FINAL-03-10#

These data are preliminary and have not undergone final quality control by the National Climatic Data Center (NCDC). Therefore, these data are subject to revision. Final and certified climate data can be accessed at the NCDC - http://www.ncdc.noaa.gov.

WFO Monthly/Daily Climate Data

000 CXUS55 KLOT 171127

CF6ORD PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6)

> STATION: CHICAGO-OHARE IL

MONTH: **FEBRUARY** YEAR: 2010 LATITUDE: 41 58 N LONGITUDE: 87 54 W

	ГЕМРЕ	ERATU	JRE ]	IN F	:	:	PCPN:		SNOW:	WIN	ND		: SUNS	SHINE	: SKY	<i>(</i>	:PK	WND
1	2	3	4	5	6А	6в	7	8	9 12Z	10 AVG	11 MX	====: 12 2mtn	13	14	15	16	5 17	18
DY	MAX	MIN	AVG	DEP	HDD	CDD	WTR	SNW	DPTH				MIN	PSBL	S-S	WX	SPD	DR
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 6 27 28 SM	30 32 33 33 33 33 33 33 33 33 33 33 33 33	14 25 23 21 30 25 23 27 10 10 11 9 25 26 25 19 33 22 21 17 28 32 28 32 32 32 33 33 33 34 35 36 37 37 38 38 38 38 38 38 38 38 38 38 38 38 38	22 29 28 27 33 27 26 22 21 29 31 35 33 28 23 31 32 32 31 32 33 34 35 31 32 32 32 33 34 34 34 34 34 34 34 34 34 34 34 34	-164394201-46-5-80-1436622-57-704	41		T 0.10 0.00 0.00 0.02 T T T 0.65 0.02 0.00 0.00 0.00 0.00 0.01 0.36 0.14 T T T T T T T T T T T T T T T T T T T	0.3 0.0 0.0 0.0 0.0 0.3 T 0.0 0.0 0.2 2.0 1.1 T 7 0.1	01111000197655454332224335554	10.2 7.3 4.6 5.2 7.7 10.5 6.5 12.0 11.8 13.3	1 14 5 14 6 14 6 14 7 18 1 20 1 20 1 20 1 20 1 20 1 20 1 20 1 20	270 270 100 40 30 110 100 330 350 310 290 310 280 40 20 260 330 320	M M M M M M M M M M M M M M M M M M M	M M M M M M M M M M M M M M M M M M M	10 9 10 8 9 9 10 8 2 6 3 2 8 10 10 10 10 10 10 10	8 18 18 18 1 1 12 19 8 18 18 1 1 18 18 1 1 1 1 1 1 1 1 1	17 21, 22, 23 37 36 24 29 26 33 16 18 18 15 18 26 20 20 18 17 17 25 18 28 28 24	90 10 330 40 310 270 300 320 310 300 60 50 250 360 320 320 320 350
===	32.2	====	=====			_			man brand brand drawn reason in	8.7	7 FA	STST	 M	 М	===== 8	====	MAX(MP	
								MIS	C	-> <i>1</i> =====	<sup>‡</sup> 28	30	=======================================			# 	37 5 	0

NOTES:

# LAST OF SEVERAL OCCURRENCES

COLUMN 17 PEAK WIND IN M.P.H.

# PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6) , PAGE 2

[REMARKS] #FINAL-02-10# STATION: CHICAGO-OHARE IL FEBRUARY YEAR: 2010

LATITUDE: 41 58 N LONGITUDE: 87 54 W

[TEMPERATURE DATA]	[PRECIPITATION DATA]	SYMBOLS USED IN COLUMN 16
AVERAGE MONTHLY: 26.7 DPTR FM NORMAL: -0.3 HIGHEST: 42 ON 19 LOWEST: 6 ON 15	TOTAL FOR MONTH: 1.64 DPTR FM NORMAL: 0.01 GRTST 24HR 0.66 ON 9-10  SNOW, ICE PELLETS, HAIL TOTAL MONTH: 22.5 INCHES GRTST 24HR 12.6 ON M GRTST DEPTH: 9 ON 10	2 = FOG REDUCING VISIBILITY TO 1/4 MILE OR LESS 3 = THUNDER 4 = ICE PELLETS 5 = HAIL 6 = FREEZING RAIN OR DRIZZLE 7 = DUSTSTORM OR SANDSTORM: VSBY 1/2 MILE OR LESS
[NO. OF DAYS WITH]	[WEATHER - DAYS WITH]	8 = SMOKE OR HAZE 9 = BLOWING SNOW X = TORNADO
MAX 32 OR BELOW: 18 MAX 90 OR ABOVE: 0 MIN 32 OR BELOW: 27 MIN 0 OR BELOW: 0	0.01 INCH OR MORE: 8 0.10 INCH OR MORE: 5 0.50 INCH OR MORE: 1 1.00 INCH OR MORE: 0	X = TORRADO
[HDD (BASE 65)] TOTAL THIS MO. 1067 DPTR FM NORMAL -8 TOTAL FM JUL 1 4736 DPTR FM NORMAL -110	CLEAR (SCALE 0-3) 4 PTCLDY (SCALE 4-7) 6 CLOUDY (SCALE 8-10) 18	
[CDD (BASE 65)] TOTAL THIS MO. 0 DPTR FM NORMAL 0 TOTAL FM JAN 1 0 DPTR FM NORMAL 0	[PRESSURE DATA] HIGHEST SLP 30.42 ON 4 LOWEST SLP 29.73 ON 9	

Explanation of the Preliminary Monthly Climate Data (F6) Product
These data are preliminary and have not undergone final quality control by the National Climatic
Data Center (NCDC). Therefore, these data are subject to revision. Final and certified climate
data can be accessed at the NCDC - http://www.ncdc.noaa.gov.

...O Monthly/Daily Climate Data

000 CXUS55 KLOT 011858 CF6ORD

PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6)

STATION: CHICAGO-OHARE IL

MONTH: JANUARY YEAR: 2010 LATITUDE: 41 58 N

LONGITUDE: 87 54 W
TEMPERATURE IN F: :PCPN: SNOW: WIND :SUNSHINE: SKY

-	ГЕМР	ERATI	JRE ]	IN F	:		PCPN:		SNOW:	WIN	1D		SUNS	SHINE	: 5K	Υ	:PK 1	WND_
1	2	3	4	5	6A	6в	7	8	9 12z	10 AVG	11	12 2MTN	13	14	15	16	5 17	18
DY	MAX	MIN	AVG	DEP	HDD	CDD	WTR	SNW	DPTH				MIN	PSBL	S-S	WX	SPD	DR
1 2 3 4 5 6 7 8 9 1 14 15 16 17 18 19 20 21 22 22 23 24 25 26 27 28 29 30 31 20 21 21 21 21 21 21 21 21 21 21 21 21 21	16 11 18 18 20 22 27 21 26 31 33 33 33 46 32 21 21 22 23 24 21 22 23 24 24 25 27 27 28 29 20 20 21 21 21 21 21 21 21 21 21 21 21 21 21	52 -17 130 1611 60 150 191 27 24 333 34 319 15 15 15	11 7 9 13 18 15 19 14 9 21 26 27 36 30 25 24 29 33 34 39 38 26 18 12 13 22 22	-12 -16 -14 -9 -4 -7 -3 -8 -13 -1 4 6 15 9 4 3 8 11 7 11 2 17 16 -10 -10 -1 -1 -1	548556 55652 5646 56449 3892 362336 3749 55243 43	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	T 0.00 T T T 0.01 0.27 0.27 T T T T 0.00 0.00 T T 0.00 0.01 0.08 T T 0.49 T T T 0.00 T T 0.00 T T 0.00 T T 0.00 T T T T	0.0 TTTTT00 0.13.9 3.5 TTTTT00 0.0 TT00 0.0 0.0 0.0 0.0 0.0 0.	222223876655552222222210000111111	11.1 12.2 8.8 14.0 10.7 5.4 4.0 15.0 12.2 14.0 14.0 14.0 7.6	18 16 17 16 17 16 17 16 17 17 17 17 17 17 17 17 17 17 17 17 17	340 330 340 320 330 340 320 210 340 220 240 290 310 320 40 140 190 270 280 300 50		M M M M M M M M M M M M M M M M M M M	10 10 10 7 9 10 10 10 10 7 4 7 9 4	18 1 1 18 18 1 1 1 46 18 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		360 340 310 300 340 10 220 330 220 230 210 300 250 60 160 190 250 280 300 40 60
SM	850 ====	) 5: ====	10 =====	: =====	1328 ====	0	1.13		9.1	307.6	=====		M	~	237			====
AV ==	27.	4 16	. 5 					MIS	C:			STST 260	М	М	8	#	MAX(MP 38 26	

NOTES:

# LAST OF SEVERAL OCCURRENCES

LUMN 17 PEAK WIND IN M.P.H.

PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6), PAGE 2

STATION: CHICAGO-OHARE IL

Page 1

**JANUARY** MONTH: YEAR: 2010 LATITUDE: 41 58 N LONGITUDE: 87 54 W

. EMPERATURE	DATA]
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#### [PRECIPITATION DATA]

#### SYMBOLS USED IN COLUMN 16

AVERAGE	MONTHLY	<b>/</b> :	21.9
DPTR FN	1 NORMAL:	:	-0.1
HIGHEST	·: 46	ON	24
LOWEST:	-1	ON	3

TOTAL FOR MONTH: 1.13 DPTR FM NORMAL: -0.62 GRTST 24HR 0.52 ON 7-8

SNOW, ICE PELLETS, HAIL TOTAL MONTH: 9.1 INCHES GRTST 24HR 3.9 ON M GRTST DEPTH: 8 ON 8

TO 1/4 MILE OR LESS 3 = THUNDER4 = ICE PELLETS 5 = HAIL

9 = BLOWING SNOW X = TORNADO

1 = FOG OR MIST

6 = FREEZING RAIN OR DRIZZLE7 = DUSTSTORM OR SANDSTORM: VSBY 1/2 MILE OR LESS 8 = SMOKE OR HAZE

2 = FOG REDUCING VISIBILITY

[NO. OF DAYS WITH] [WEATHER - DAYS WITH]

22 MAX 32 OR BELOW: 0.01 INCH OR MORE: MAX 90 OR ABOVE: 0 0.10 INCH OR MORE: 29 0.50 INCH OR MORE: MIN 32 OR BELOW: MIN 0 OR BELOW: 1.00 INCH OR MORE:

0

0

0

0

3 0 0

[HDD (BASE 65) ] TOTAL THIS MO. 1328 DPTR FM NORMAL -5 3669 TOTAL FM JUL 1 DPTR FM NORMAL ~102

CLEAR (SCALE 0-3) 3 PTCLDY (SCALE 4-7) 11 CLOUDY (SCALE 8-10) 17

[CDD (BASE 65)] TOTAL THIS MO. DPTR FM NORMAL TOTAL FM JAN 1

[PRESSURE DATA] HIGHEST SLP 30.57 ON 29 LOWEST SLP 29.18 ON 24

..EMARKS]  $\#FINAL-0\bar{1}-10\#$ 

TPTR FM NORMAL

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